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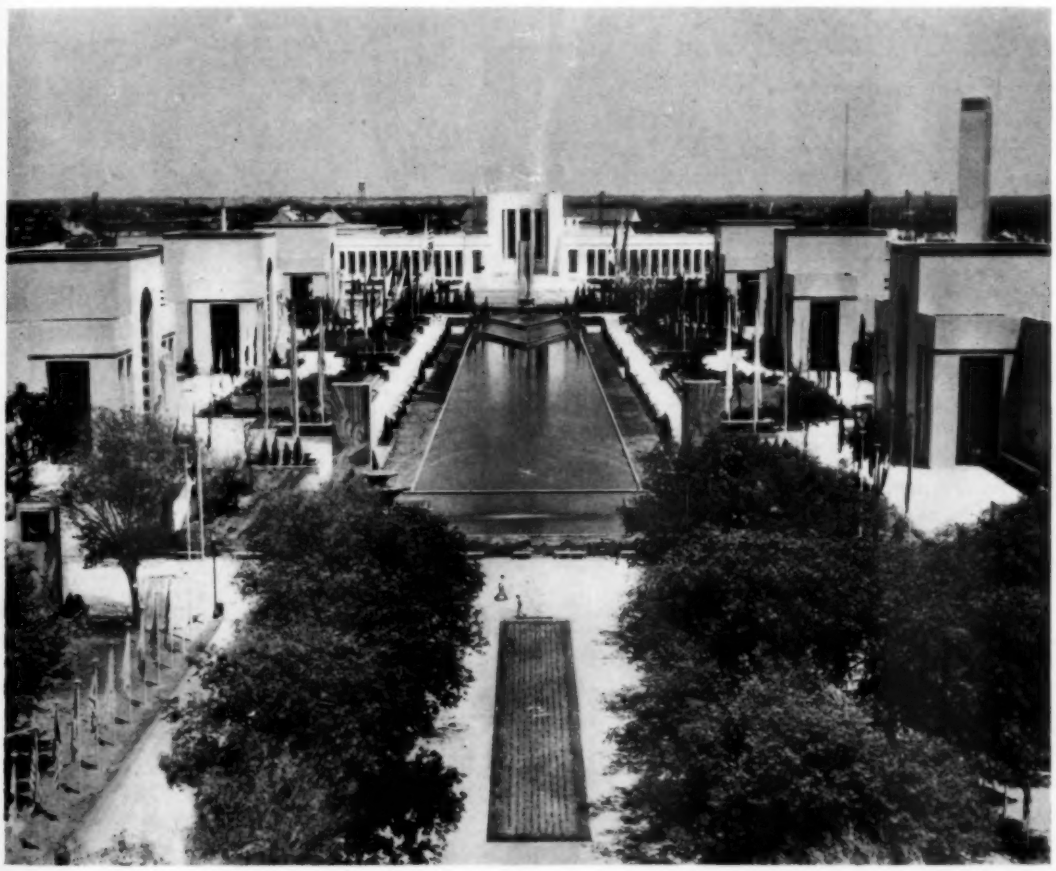
# AMERICAN NURSERYMAN

*The Nurseryman's Forte: To Make America More Beautiful and Fruitful*

JULY 15, 1936



Esplanade of State at Dallas Exposition

## Pre-Convention Number

**The Nurseries of Texas**
**Program for A. A. N. Convention**
**Landscaping at Dallas Exposition**
**Glorious Gentians**
**Solid Type of Cavity Repair**

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# AMERICAN NURSERYMAN

**Chief Exponent of the Nursery Trade**

F. R. KILNER, Editor

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## ON TO DALLAS!

Strange to say, the southwest has been at least twenty degrees cooler than the northwest during the recent hot spell. So the vagaries of the weather may add to the attendance at the A. A. N. convention at Dallas next week; nurserymen may go south to keep cool!

The famed southern hospitality is warm, however, as is borne out by the announcement of the reception committee in this issue. What they won't do for visitors!

More than that, the members of the Texas Association of Nurserymen join in an invitation to visit their nurseries before and after the convention. The publicity committee of the state organization tells about the members' places in this issue. Texas holds much of interest this summer, and there should be a large gathering of the trade there next week.

## WHAT A CHANGE!

A scant time ago the nursery trade was bogged down by a surplus of stock, that caused those who owned it to slash prices right and left to find buyers. The distress was well-nigh universal, and everyone suffered from low prices and lack of earnings.

Quicker than revival of business, the weather wrought a change. Cold winters killed trees and shrubs. Hot, dry summers reduced the nursery supplies. Last season the results were most apparent in fruit trees, which were insufficient for demands, even when prices advanced. Now the demand for replacements of winter-killed stock, plus the inroads of drought on field plantings, has changed surpluses into shortages.

If better general business conditions bring improved calls for nursery stock, the situation will be the more unfortunate, as rising prices restrict purchases. That fact has been illustrated the past spring as regards fruit trees. The soaring prices seemed unreasonable to some, and led retail nurserymen in many instances to discontinue sales efforts. The ideal condition, of course, is an adequate supply of stock at prices satisfactory to the buyer and at the same time yielding an adequate margin to the producer. But nursery crops, like farm products in general, are subject to the vagaries of weather conditions, and that ideal seems as unapproachable as ever.

## STATELY TREES ON PRAIRIE.

A city with stately trees and only thirty years from open prairie is certainly interesting and especially at this time in southern Texas. Such a locality is described by E. Porter Felt, of the Bartlett tree research laboratories; it is League City, down near Galveston, Tex.

The trees upon the streets are principally live oaks, sycamores, pecan and cedar. Some of the trees have limbs more than thirty feet long, that reach far out over the streets, giving a cool and inviting shade. Many of the live oaks have trunks two feet in diameter, and to the casual observer it would seem impossible that there should be such a growth within three decades. It is also stated that, with one exception, all the business establishments in League City are owned and operated by women, and although the trees, according to the record, were planted by men, it is quite within possibilities that the present good condition of these trees is due in large measure to the watchfulness and care of these enterprising and far-sighted women. They have recognized perhaps more fully than men ordinarily do the actual value of "green gold," or growing trees, in their community.

There was not only planting of trees, and proper care, but there was, evidently, a wise selection of species also. Trees thrive in most parts of the United States where conditions are reasonably favorable and, judging from the above record, we must conclude that the trees selected were well adapted to the locality.

## CODE OF ETHICS.

The experience of generations, particularly more recent, proves that it is impossible to legislate a people into righteousness. So we fall back upon the principles of morals and ethics, less tangible but frequently more effective, since they are matters of self-interest as well as public interest. Attempt to formulate an N. R. A. code for nurserymen was found not feasible, but the New Jersey Association of Nurserymen has formulated a brief and simple code of ethics which has been found quite beneficial to the trade in that state. In the words of Secretary Louis C. Schubert, "this is one of the finest bits of thought along these lines, and adherence to its principles would benefit our entire industry."

The four short paragraphs of this code of ethics are printed on the letterhead of the New Jersey Association of Nurserymen, and that it may have wider consideration and observation, it is given herewith:

"To regard the nursery business as an honorable vocation, the practice of which is necessary to the happiness and well-being of mankind.

"To express my faith in the nursery business by increasing my knowledge and efficiency, and in all ways endeavoring to become a craftsman worthy of the industry.

"To hold that my own business transactions are of mutual benefit. To conduct my business in a manner that shall be considerate of and just to my fellow nurserymen, and to condemn any and all forms of destructive sales methods.

"To see beyond the boundaries of my own business into the whole industry—past profit to usefulness—past competition to coöperation. To be fearless in doing right and aid in elevating the standards of our industry."



XUM

# AMERICAN NURSERYMAN

[Registered U. S. Patent Office]

**The Chief Exponent of the American Nursery Trade**

*The Nurseryman's Forte:*
*To Make America More Beautiful and Fruitful*

VOL. LXIV JULY 15, 1936 No. 2


# Landscaping at Dallas Exposition

***Visitors at A. A. N. Convention Next Week Will See Plantings Harmonious to Plains Region at Texas Centennial Exposition***

At the Texas centennial exposition, in Dallas, the landscaping department was fortunate in being permitted to start its work at the time the architects first began their plans. Because of being on the ground before sod was broken and before the $25,000,000 construction and exhibit details were turned over to the contractors, the landscapers simplified this part of the building of the exposition. It resulted in a finished job that gracefully combines the beauty of subdued dignity with the brilliant colors typical of the southwest.

In considering the effect as a whole, the landscaper planted flower beds with the thought of keeping them as simple as possible, thus avoiding a spotted effect. In the past, the most popular idea has been to alternate colors—a narrow strip of green, a parallel strip of vivid red, a border of yellow or some other dominant color. At Dallas the determination has been to create a wholly harmonious landscape by utilizing, insofar as it was practicable, solid beds of color in order to avoid confusion. One has but to motor over the limitless plains of Texas and other states favored with wild flowers to sense the logic of this. Such a trip will reveal hundred-acre fields of one solid color, a huge meadow of green here, a vast expanse of blue there, a magnificent stretch of brown or red elsewhere.

Landscapers avoided creating an abundance of the conventional stars and squares which have been so overdone heretofore. Hedgings were used, instead, with a large proportion of green (evergreens and lawns). Brilliant reds, yellows and the other "eye-attractions" are there, but minimized rather than permitted to dominate the scene.

It should be pointed out, however, that the whole effort was not concentrated on subduing color. Color was used with the thought of harmony predominant. Along the Midway, for instance, the gayety of the flowers matches the excitement of the lights, which, when night comes and they are all switched on, have a capacity lighting load of 10,000 kilowatts. This load is equivalent to that required by a city of 100,000 population. Then in the approaches to some of the other scenes, landscapers deliberately accelerated the psychological tempo with flower colors of as warm a hue as could successfully be used in this area.

Knowing that the work would be of a permanent nature, exposition landscapers carefully studied the factors of dry weather and hot winds. Hardy plants were selected to insure a full season of successful horticultural display. Zinnias, petunias, lantanas, plumbagoes and the periwinkles all stand great extremes of temperature.

Evergreens are in abundance over the 187-acre tract. Chief among them are the evonymus and other broad-leaved shrubs. They are depended on to give a balance to the nature picture, along with the broad expanse of lawn. In this connection, it is interesting to note that practically all of the grass was either sodded or rolled in during the last few days prior to the opening, June 6. A humorous side light to this is the instance of the visitor to the exposition grounds who came one day and lamented the fact that the "big show" would open with "all that black dirt around everywhere." Visiting the same place the following day, he refused to believe his eyes when he saw gardeners mowing a luxuriant green lawn in front of the administration building.

Of especial interest is the treatment accorded the Court of Honor, which is located directly in front of the Hall of State building. This area is, perhaps, the most impressive from a historical viewpoint of any in the entire exposition. Immense statues of the leaders of early Texas have been placed in this court, and the atmosphere is one of dignity and reverence. Obviously, it would have been wrong to disturb this skillfully wrought approach to the building of the state of Texas and its historical exhibits, with a blatant introduction of riotous color.

Box planting was used to create a hanging garden scene with oriental arbor-vitæs ranging from eight to ten feet tall. They were put in to form a decorous inclosure to the Court of Honor. Their height was specified by the architectural planning board because it felt that something was needed to accent and emphasize the entrance from the Esplanade. This, because the Esplanade finds its greatest importance in the fact that it is the first view of the exposition to be had by the thousands of visitors who daily surge through the main entrance gates.

Again, in thinking of the entire

layout, instead of just one isolated unit after another, landscapers refrained from using single plants anywhere. Masses were planted in each instance so that the effect would not be ragged. The sole exception to this rule is in the Four Gardens of Texas, where every wild flower and shrub of the state is found representative of its area, north, east, south or west. Even here, however, are small clusters to give a noticeable view of the varied growths.

The arbor-vitæ background to the Court of Honor has added height and dignity. Each box is placed atop a 15-foot pyramid-shaped column to give a total height of approximately twenty-five feet. Evergreen hedges and vines add to the formal wall which incloses the court.

The outer edges of the court, leading on the one end to the Petroleum Hall, and on the other to the United States government building, were landscaped to provide a psychological change of spirit for the visitor leaving the shrine of Texas history. Lantanas, with shrubs and flowers, were carefully woven into the color scheme. This offsets the formal dignity created by the peaceful green of the surrounding wall of arbor-vitæs combined with the pylons and ensemble of six flags. The flags surmount the entire scene.

## FOTHERGILLA MAJOR.

Fothergilla major, the dwarf alder, or springscent, as it has been lately called, is a purely American shrub, native of the Allegheny mountains and adjacent sections of the southeastern United States. It was first discovered in 1780 by a Dr. Garden, of Charleston, S. C., who named it in honor of the celebrated London physician and patron of natural history, John Fothergill. Like many of our choicest native species, it first found favor in England. After being grown there until 1811, it seems to have disappeared from cultivation, remaining in obscurity until 1902, when Professor Sargent, of the Arnold arboretum, reintroduced it.

Belonging to the hamamelidaceæ and closely allied to the witch-hazels and parrotias, its family resemblance, particularly from the standpoint of its glossy, roundish-oval or obovate foliage, is quite pronounced. In blossom, however, it posseses a distinction all its own. Lacking petals, its fragrant inflorescences owe their beauty to the numerous long white stamens with yellow anthers, crowded closely together in ovoid and rounded clusters at the tips of the branches. In appearance they are not unlike bottle brushes.

Though it has not been found growing naturally north of Virginia, Fothergilla major seems to be perfectly hardy at the Morton arboretum, near Chicago, and in spite of its preference for a moist, peaty or sandy loam, has succeeded in ordinary garden soil. It is not a fast grower, however, and in all probability will never exceed four feet in height. Among its good qualities, the glorious fall coloring of its foliage must not be overlooked.

## JAPANESE QUINCES.

Retaining their common name through their vicissitudes, the Japanese quinces have undergone several changes in botanical nomenclature. Chænomeles lagenaria is the scientific name now given to the old-fashioned plant formerly called Chænomeles japonica, or Cydonia japonica, which used to be planted for hedges before the advent of Japanese barberry. It was introduced from Japan, possibly before 1800. Since it has been in cultivation so long, there are numerous varieties, with flowers of different hues, and some even with double flowers. While many of these varieties are in the trade, they are generally offered only under the species name. They are white, pink, a rich dark red and various combinations of these colors.

The true Chænomeles japonica (Cydonia Maulei now in the trade) is a lovely little plant which should be better known, according to Donald Wyman, of the Arnold arboretum. It does not grow so tall as Chænomeles lagenaria, seldom getting more than two or three feet high, but it is dense and compact, with some varieties of brilliantly colored flowers.

Since these flowering quinces, together with the common quince, Cydonia oblonga, which has little ornamental value but is used considerably for its fruits, are all members of the apple family, they are all subject to fire blight, borer and scale, and perhaps this is the chief reason why the Japanese barberry has replaced them in hedge plantings.

## GARDEN FOR IDEAL HOUSE.

The creation and construction of an ideal house by the magazine House and Garden this spring has been an undertaking interesting to architects of the landscape as well as architects of residential buildings. Erected at Scarsdale, N. Y., the house has been the subject of articles in current issues of the magazine constructing it. In the July issue are pictured several portions of the planting, which was done by Bobbink & Atkins, Rutherford, N. J. The planning and execution was by H. J. Marquardt as landscape architect.

Since it is part not only of an ideal house, but also a modern house, the garden is interesting, and the theory behind its plan and construction is doubly so. This is described by House and Garden as follows:

Probably the designer's greatest problem —as it is that of many individual home owners—was to make a necessarily small property appear reasonably large, and to do this without producing a horticultural hodgepodge. First of all, Mr. Marquardt built upon the principle that a garden should not disclose all its features at once; that in a certain amount of concealment and consequent promise of discovery is found an unconscious impression of size. Acting on this premise, he blocked out the main planting area into three distinct units: The formal garden on the main axis of the house; the wholly different nook and secluded stepping-stone shrub garden at one side; and the informal, simple and notably private lawn hidden in the planting at the other. Each of these is separate, both in character and by physical placement. Yet all are conveniently connected in such a way as to invite the eye and foot to follow a pathway or descend a pair of steps to see what fresh effects may be beyond. So, in the end, one feels that the garden is really quite a large one, after all.

And there were other considerations, too, besides the ever-present necessity of developing a landscape that would be in full harmony with the architectural character of the house. For one thing, the plant material must be thoroughly modern, and, without any risk of being monotonous, it must provide year-around beauty to a marked degree. Naturally, this called for the free use of woody plants as distinguished from flowers proper—choice evergreens like Taxus cuspidata, pachysandra, rhododendrons and mountain laurel, and deciduous species such as several forms of hardy azaleas, privets and lilacs, and a procession of pansies, tulips, petunias and other annuals and perennials to brighten the beds of the formal garden from early spring until well into the autumn.

All in all, a garden that reflects the discriminating planting taste of 1936. A garden, too, which is as self-sustaining as such a thing may be without suggestion of monotony. A garden to live in and work in and enjoy with that sense of quiet satisfaction and possessorship which is the birthright of all good plants-people the world over.

XUM

# Glorious Gentians

***Beautiful Species Warrant Culture of More Gentians Than Few of Easy Culture Now Found in Gardens—By C. W. Wood***

Let me forewarn you at the outset that these notes on gentians will contain little definite information on their culture, for gentiana is one genus that we cannot be positive about. One great horticulturist has said: "About gentians it is impossible to dogmatize; no race is so incalculable, no race so disconcerting. All one can say is, if a gentian will thrive with you, you cannot go wrong with it; if it does not thrive, not all the king's horses nor all the king's men will induce it to do so. And this, as a cultural direction, is vague and unsatisfactory." This is perhaps one reason why there are so few gentians in American gardens and nurseries. Yet it is no reason why we should continue in our present condition, for there are a few comparatively easy species, and success with them may lead to greater triumphs among the difficult ones.

The foregoing may sound rather pessimistic and it is meant to be, for one should enter into any venture with gentians with a certain amount of pessimism. Then the smallest amount of success will bring with it a real thrill of accomplishment. And some successes are sure to follow if one is persistent enough in his quest.

The beginner in gentian culture is usually advised to confine his first venture to one of the cruciata group, most of which are dowdy plants of little merit except that they have some brilliantly beautiful relatives and are easy to grow. I can see no reason whatever for growing the following members of this group: G. dahurica, Kesselringii, macrophylla, tibetica and Walujewi. None of these (and others could be added to the list) has any garden merit so far as I can see, their only recommendation being their ease of culture. The species (G. cruciata) that gives its name to the group is hardly to be classed with the ones just named, being less ugly and possessing a certain amount of garden value, though the 4-lobed, bluish flowers are too small for their floppy, leafy stems. Its greatest value lies in the fact that one can have a passably good gentian at no trouble at all, the plant growing happily in any acid-free soil in sun or light shade.

Now that we have the poor relatives behind us, one step forward brings us to a gentleman, G. Przewalskii, who, it seems to me, has been too highly praised by Farrer, among others, when he says that it "is a very lovely person, whom everyone ought to have," and too plainly damned by the half-praise of "a very good thing in its way," according to Mrs. Wilder. Somewhere between these two extremes, G. Przewalskii, a 6-inch plant with bright blue flowers during August, will find its true place—it is an easy-going plant in any sunny spot that is not desert-dry. It comes readily from fresh seeds and grows quite rapidly into salable plants.

Among other easier species ("easy" here is only comparative) one should not overlook two American plants, G. puberula and G. Porphyrio. The first of these, according to floras, is found on dry slopes and prairies from Maryland to Georgia and northward as far as Minnesota, though my own experience with the plant leads me to believe that it is more often to be seen in moist meadows. At any rate, it seems best in the garden when given a fairly moist spot where it can entwine its roots among those of other low plants. It is interesting to note in this connection that this gregariousness is a characteristic of most gentians. The one in question grows from eight to twelve inches high, each stem carrying a cluster of pure, bright blue funnels as much as two inches long during late September and early October. Why it is so seldom seen in gardens is hard to understand, because it is quite easy to grow in common garden soil that is not too dry, though I suspect that it prefers one that is at least slightly acid. G. Porphyrio is of more local distribution, being found from New Jersey to Florida in the coast states. It is among the most beautiful of the tall species, with its intense, azure blue flowers on 8-inch stems. It blooms earlier than the next preceding, usually in August, and seems best in a moist, sandy, acid soil. Both of these species come readily from fresh seeds, but growth in their early stages is provokingly slow. My best success has come from sowing in pans indoors, in which they are carried two, three or, perhaps, four months, when they are potted off singly or transplanted to a shaded frame in a sandy, acid soil.

Asia has given us many a good gentian, some of them being too difficult for all except the specialist, while others are both easy and beautiful. Of the latter, G. septemfida deserves the attention of all growers of hardy plants, being easy enough of culture to sell with confidence of success and beautiful enough to satisfy the most exacting. It is somewhat variable, though usually eight to twelve inches high, with soft blue flowers during July and August, and has given rise to some varieties that are even more beautiful than the type. The plant known in the trade as G. Lagodechiana is probably the best of the septemfida variations, producing clusters of large, white-spotted, blue flowers at septemfida's blooming time. Much confusing information has been given out regarding the culture of this group of gentians, most of it applicable to conditions in Great Britain and our own Pacific coast but not to the trying climate of eastern United States. None of them does well for me in full sun unless given constant root moisture, while all Asiatics that I have grown (G. cachemerica, which belongs to the same group as G. verna, would be one exception to this rule, for it is a very difficult plant even in the best gentian climates) have been quite easy when given light shade. In the nursery they make maximum growth in a lath-shaded frame in soil made up of a sandy soil and leaf mold.

If you are interested in gentians (and you should be if you would get what is coming to you in the plant business), you should get acquainted

with these Asiatics, particularly the easier ones. Included in the latter are three grassy-leaved species, Farreri, sino-ornata and Veitchiorum. Of these, the last-named is the easiest, behaving almost as well as septemfida under the same conditions, though perhaps requiring a little more moisture, and producing an abundance of sapphire blue trumpets at the usual time (July and August) of this group. The other two, Farreri, with white-throated, azure blue flowers, and sino-ornata, of deep blue color, require a little more care, needing a cool, gritty root run. And here is more confusion, some authorities saying they want a limy soil, while others are positive in saying no lime. In my own experiments both species have done well in a neutral medium, the presence of moisture seeming to be of more consequence than acidity or alkalinity. Better than either of the latter and truly a remarkable plant is Macaulayi, Wells variety, a hybrid of the two, requiring the same care. Before closing with the Asiatics, we should consider Purdomii, which, according to experience here, has been easier than any of its neighbors except septemfida. All it seems to require to produce mats of narrow, green foliage and its large, deep blue trumpets in our climate is a cool spot in light shade and a little more than the average moisture.

Before going on to the "gloriously incalculables," let us gather up a few loose ends of gentian facts and fancies. Among the gentians long known to gardeners, a number seem to have been overlooked to a great extent in this country. The willow gentian, asclepiadea, is a case in point. Here we have a plant that is easily grown in a leaf moldy moist spot in light shade (I hope it is understood that these notes are based on experiments in the dry climate of the middle west and may not apply with equal force to other parts of the country) and is of more than ordinary beauty. It grows a foot to eighteen inches high (two feet, it is said, under ideal conditions), its leafy stems holding arching wreaths of blue trumpets. Like several species, it shows some variation in color of flower, requiring selection among seedlings to get the glorious shade that is so desirable.

To close these brief gentian notes, we have left the two "gloriously incalculables," acaulis and verna. I am in no position to give anyone encouragement, because they refuse to do anything for me. Yet that is no reason why others cannot succeed with them, for there is no predicting what they will do. I know a garden where verna grows, or did grow a few years ago, like a weed, blooming as profusely as the dandelions in the meadow, while in a neighbor's garden not more than a half-mile away and in apparently the same kind of soil, it languished throughout the years, neither dead nor alive, and never a flower to its credit. Do not give up hope then until you have tried gentians in your own nursery. Success in their culture will be ample reward for the care they have been given, and the dollar or more per plant which they command in the retail market will not look bad in your cash book.

## CORNELIAN CHERRY.

The cornelian cherry, Cornus mas, a native of southern Europe and western Asia, has been used in gardens for over 300 years, and in this country for over a century. It is of value chiefly for its early, bright yellow flowers, which apparently are not injured by late freezes. The flower buds themselves can usually be counted on even during the coldest winters in the eastern United States, wrote Donald Wyman recently in the Arnold arboretum bulletin. It blooms at a time when there is little else of importance in flower except the early species of hamamelis and Daphne Mezereum. Added to its effectiveness of flower is the beautiful, rich, dark green, shiny foliage, which is attractive all summer long. The fruits are something like elongated cherries, ripening during the summer time, red in color and in Europe often used for making preserves. The plant itself is vigorous and dense, and is even used for clipped hedges, though it would be better perhaps to use it as an unclipped windbreak. There is a yellow-fruited form growing at the Arnold arboretum.

The amount of fruit it bears apparently depends on weather conditions, for when the weather is particularly cold at blossom time, there often results a small amount of fruit later.

The Japanese cornelian cherry, Cornus officinalis, is similar from a horticultural standpoint. It, however, is native of Japan and has only been in this country about sixty years. There is a striking difference in the bark of these two plants, in that the bark of C. mas is close in texture and a dark gray, while that of C. officinalis is loose, splitting and peeling off on the second and third year's growth into short, papery strands. It is reddish brown in color. From a horticultural standpoint one of these plants is practically the same as the other. They are both valued for dependable early flowers, good foliage and fruit, and a dense habit of growth.

## HARDY SEEDLESS GRAPE.

A search begun sixteen years ago for a seedless grape that would at the same time be hardy under New York conditions has been crowned with success in the naming of a new variety originating on the grounds of the state experiment station at Geneva Bronx Seedless in recognition of the part played by the New York city botanic garden in the development of seedless grapes. At the same time a number of other promising seedlings and selections have been accumulated in the course of the experiments.

The seedless fruits of grapes are of two main types. In one type, exemplified by the Corinth grape, the ovules are abortive and the fruits develop without fertilization and are entirely seedless. In the second class, exemplified by the Sultanina grape, the fruits contain one or more soft, pulpy and aborted seeds. In grapes with this type of seeds the fruit is larger than in the entirely seedless grapes; hence the soft-seeded type is the more valuable in the production of new seedless grapes.

The new Bronx Seedless belongs to this latter group and is one of eighty-three seedlings which bear seedless fruit, twenty of which also possess a combination of other desirable qualities. Bronx Seedless is hardy, at least to average winters at Geneva; the fruits are reddish in color, resembling Delaware somewhat, but the clusters and fruits are much larger than Delaware; the fruits have a tight skin like the so-called California grapes; the fruits are of good flavor and quality; they ripen at Geneva, and the rudimentary seeds which they contain are soft and are not noticeable when the fruits are eaten.

# The Solid Type of Cavity Repair

***Principles in Important Phase of Tree Surgery Presented before Western Shade Tree Conference by M. F. Blair, Palo Alto, Cal.***

The subject of cavity work has been highly controversial in various times and places. This may be partly accounted for by the fact in this country there is a broad spread in climatic and soil conditions, in the fungi, insect pests and in the species of trees themselves. Such widely varying conditions give rise to many problems which must be met and solved by the operator. To aid him he has his own judgment and experience, his knowledge of local conditions and, in addition, access to scientific books giving the histories and hosts of diseases and insects. To my knowledge there has been no book published that attempts to cover the general field served by tree surgeons or arborists.

Tree surgeons are inherently individualistic, but it is becoming increasingly evident that each by his own method arrives at the common conclusion that the excision of diseased or decaying matter from the trunk, main roots or branches of a tree, followed by the application of a suitable disinfectant and paint, will preserve the exposed wood indefinitely, when untreated surfaces continue to decay.

Through our local Tree Surgeons' Association, the Western Shade Tree Conference and the National Shade Tree Conference, and through liaison with schools, colleges and governmental agencies, we are in a position to assemble a mass of facts for the progress of our profession, though at times we may seem like the Irishman who "didn't know where he was going, but who got there just the same."

### Ancient Practices.

In his paper "Historical Background of Cavity Work" given at the Eleventh National Shade Tree Conference, in Philadelphia, in August, 1935, Mr. Bartlett stated that "two thousand years before Christ, horticulture was far from being an unknown art and that trees were pruned and their wounds dressed with substances ranging from mud and clay to a form of beeswax, by gardeners in the Babylonian and Assyrian gardens 2000 B. C."

He stated further that in Europe from 1631 to 1832 writers advocated the use of cow dung as a principal ingredient of their filling and plasters. In 1791 William Forsyth was awarded four thousand pounds by the British Parliament for devising a composition of "fresh cow dung, old lime, wood ashes and sand."

In 1832 "Sylva Americana was produced. D. J. Browne offered a less compound mixture, which consisted of three parts of cow dung and one of sifted lime."

Mr. Bartlett stated that in his search through old books tracing the history of cavity treatments, he found evidence of much heated argument over the relative merits of many strange compositions. Let us hope that our combined efforts have definitely lifted tree surgery out of its dark age.

My remarks and observations on cavity work are based on my own experience. Perhaps some operators may have had divergent experiences. Others may have developed views and methods parallel to my own. In any event, it seems desirable that we bring forth what we may have developed for the general good.

### Principles.

Cavity work is an important part of tree surgery. Proper trimming and bracing may prevent many cavities, but when the damage has been done, the skilled cavity man may greatly aid the tree in healing its wounds. Boring insects or bruises may cause the initial wound that gives fungi an opening, or a cavity may result from sunburn or from some types of fungi that attack healthy bark, paving the way for other wood-destroying species.

It will be found that no two large cavities are alike in all details. However, the principles are the same in all cases.

The principal objects of cavity work are:

1. To arrest decay and to prevent further decay.
2. To furnish a support for healing callus.
3. To make healing possible or to hasten it.
4. To exclude ants, snails and mosquitoes.
5. To improve the appearance of the tree.
6. In some cases to strengthen the tree.

To achieve these aims it is necessary:

1. To remove all wood carrying active fungi.
2. To destroy all borers in and around the cavity.
3. To extend the filling so close to the cambium that the callus may cover it before the intervening wood checks and decays.
4. To shape the cavity so there will be no starved areas of bark at any point.
5. To furnish drainage.
6. To disinfect and paint the wood.
7. To protect the cambium.
8. To fill neatly with a firm, durable material.
9. In some cases to add braces.

### Types of Cavities.

There are many types of cavities and combinations of types. The principal ones are:

1. Major trunk and branch cavities.
2. Facings.
3. Saddle or crotch cavities.
4. Base cavities.

Before any cavity work is undertaken the tree should be examined to see if its condition justifies the expense and effort. If it needs feeding to hasten the development of new callus, then it should be fed. Adverse conditions should be eliminated as far as possible, to insure success.

Small cavities in the upper parts of trees should not be neglected, for destruction of tissue may extend downward behind large, expensive fillings, making them useless.

### Methods.

Let us assume that we wish to treat a major trunk cavity where a large branch has broken, leaving a jagged stub and a splintered trunk.

The first step is to saw the stub off flush with the trunk. A front view of the wound will probably show some sound heartwood and sapwood in addition to the opening of the cavity and the splintered wood. This sound wood must be excised to

an inch or more in depth and prepared as a facing, for even if painted, it will check and eventually decay if left exposed. The splintered wood must be removed to sound tissue and included in the cavity. The cavity area should then be extended into points at both the top and bottom to prevent starved areas with the resultant dead cambium and inability to heal. The angles of the points must be determined by the direction in which the sap ducts trend, and by the type and vigor of the tree.

The excisions for the points, if in sound wood, need not be more than an inch or two in depth. These extensions increase the length of the cavity considerably, but experience has proved that in most cases they are advisable. All decayed and infected tissue should be removed.

If the points, when extended, do not reach the limits of the cavity or of the infected tissue, it may be necessary to make one or more incisions beyond in order to follow fungus mycelium or to treat the wood. In some cases it is possible to use long scrapers and gouges to do the work without making another opening. Proper drainage should be assured. A hole may be bored tapping the bottom of the cavity or it may be allowed for in the bottom of the filling itself. Some trees, as elm or maple, with a tendency to bleed, sometimes require a pocket drain below the filling to reduce excessive "fluxing" around the filling.

Some vapor may condense behind the filling so it is sometimes desirable to cut a narrow trough around the cavity about three-quarters inch back of the face to aid in conducting it downward and outward. In areas where the bark comes to the incision it should be "traced" or cut back three-sixteenths to one-quarter inch and the resulting shoulder of wood and the bark shellacked immediately. If the bark is beveled at about a 45-degree angle it will make the filling operation easier and improve the appearance of the cavity. The cambium in all cases should be protected with a coat of shellac or other preparation that may both exclude air and disinfect as soon as exposed. The alcohol in shellac is an effective disinfectant without excessive penetration. It is a common practice to seal the shellacked area later with asphalt paint.

All operators, I believe, agree that great care should be observed in working on or near the cambium layer, so that it is not torn, bruised nor allowed to dry out. Keen edges should be maintained on all chisels and gouges used.

**Disinfectants.**

The next step is to disinfect and paint the wood. The disinfectant may be put on separately or applied with the paint.

Either copper sulphate or mercuric chloride may be used effectively.

Many satisfactory paint preparations are available on the market, in the main consisting of asphaltum emulsions.

If the shell of the tree is thin, it may be advisable to use braces to prevent wood's pulling away from the filling. Rods may be put through the tree or lag bolts may be screwed into the wood on the inside of the cavity. Imbedded in the concrete, they are helpful in preventing sag.

**Filling.**

All of these details completed, the cavity is ready for filling.

It may be an inherent instinct to cover unsightly wounds in trees, but by the above efforts we have passed the primitive stage of stuffing the original opening while piously thinking, "Well, that will keep the water out, anyway." The cavity should be filled, but let it be with better material than those in use a hundred or more years ago.

Many materials and combinations of materials have been tried. Asphaltum and felt, asphaltum and sand, creosoted wood blocks, oakum, sawdust or ground cork mixed with cement and sand, and plain cement and sand.

The last-named is oftenest used. Though it has certain disadvantages, it is always available, is economical, durable and easily prepared.

Its principal disadvantages are that it is heavy and inflexible, has a tendency to absorb some moisture from the air and does not change in temperature at the same rate as the surrounding wood. However, these disadvantages may be modified considerably by methods employable in its use.

In regard to weight. Large, deep cavities and hollow trunks or branches need not be filled solid. After the entire cavity is disinfected and painted, board backing may be securely placed four or more inches behind the cavity face and the filling made against it. This greatly reduces the weight and provides a dead air space between the back of the filling and the interior of the cavity. This space reduces moisture condensation to a minimum and allows for more latitude in temperature changes. A firm grip in the walls of the cavity must be assured for the filling so that when the pressure of the callus covering the face is exerted, it may not be pushed into the dead air space.

**Cement Filling.**

If preferred by the operator, a solid filling may be used, but it should be borne in mind that a columnar filling with sufficient mass and rigidity to resist the normal flexing of a tree trunk must inevitably result in the gradual wearing away by friction of the surrounding woody tissue or that of the filling material. If expansion joints are provided to permit flexibility, then the rigidity is destroyed. And the filling itself should not be relied upon greatly to aid the tree or branch in resisting the pressure of air currents or other forces inducing stress.

Two parts fine, sharp river sand and one part cement thoroughly mixed dry, then carefully mixed with water until it will retain its form after being squeezed in the hand, are used for the filling. It must be tamped firmly over the entire face and particularly around the edges while being placed. To permit some flexibility and to avoid cracking of the filling as the tree sways or temperature changes cause expansion and contraction, expansion joints may be used. They are usually of heavy roofing paper and are built into the filling as it is placed. In long, narrow fillings, only horizontal joints are needed. In large, wide cavities, both horizontal and vertical sections are advisable. The paper joints in the horizontal sections should slope downward toward the face to prevent rain water from being conducted behind the filling.

To prevent chipping and to improve the appearance of the cavity the sections on each side of the joints should be beveled.

It is of vital importance that the

filling does not cover the cambium layer. We intend that the cambium layer shall develop new tissue and cover the filling. To make sure that this unpardonable error is not made, the shoulder of sapwood left after "tracing" should be used as a guide and a trowel or slick used to scrape away any corners that may be above it. The concrete should be sealed by running a slick around the edge.

Earlier in the practice of tree surgery it was customary to make the fillings rounded to conform to the curve of the tree or branch, but practice has proved it better to reduce the curve and permit the formation of a thicker layer of new wood.

A casual inspection might lead one to suppose that a callus in covering a filling rolls down and over, but the fact is it rolls from underneath outward, while it closes over the filling. Yet if the filling were not in place, this tendency would be insufficient to enable the callus to bridge the gap, but it would attempt to follow completely around the inside of the cavity.

Concrete fillings should not be put in place during freezing weather. If frozen before it sets, concrete will crack and crumble.

### Finish.

There are several methods of putting the finish on the face of cavities.

Some operators merely slick it smooth and call it a day. Some mix lampblack with the concrete to make the color approximate that of the tree. Others use asphaltum paint. However, that material eventually peels or breaks down when used on concrete. The most lasting waterproof paint that I have used is composed of lampblack, painters' graphite, boiled linseed oil, cement and a small amount of turpentine.

The paints, of course, are applied after the concrete has set. At that time the margins of bark may be cleared of particles of cement and a fresh coat of shellac or other protective material applied.

Another satisfactory method of finishing a cavity is to apply a wet mixture of graphite, lampblack, cement and a little sand to the face of the filling while it is still green. It is applied with a slick to a thickness of about one-eighth inch. If this method is used, allowance should be made for the extra thickness when placing the filling.

Time does not permit detailed discussion of the various types of cavities, but the principles are the same in all cases. In the application of these principles the operator must assume sole responsibility for their proper execution. Those who have need of the services of arborists also have the duty of ascertaining that these men employed are qualified. Those disbursing private or public funds in the employment of men improperly trained for the execution of the work are remiss in their duty to their trees, themselves or those whom they represent.

### Competent Workers.

Those who would become competent tree surgeons should possess a natural aptitude to acquire biological understanding and to develop mechanical skill. They should have balance and judgment in their work in order to avoid unnecessary risk to life, limb and property. They should have a strong, active physique, be able to tolerate the bites and stings of insects and the discomfort of working under difficult or hazardous conditions, if necessary to complete their task.

They should persevere in the pursuit of knowledge and, in spite of all difficulties, retain a realization of the rights of man and a sense of ethics so vividly that they cannot permit themselves to slight the work intrusted to them, even though it might mean a temporary financial advantage.

J. E. Conard.

There is much for a tree surgeon to do in properly fitting himself for his work and carrying it forward and upward. Progress is being made. It is for us to continue to improve our craft, and may each year that we meet mark a new milestone of progress.

## POLEMONIUM CARNEUM.

Polemonium carneum, a rock garden plant quite different from the rather weedy P. occidentale, is a native of Oregon, growing high in the Cascade mountains. From that state comes the assertion, in a recent issue of Horticulture, that this is as lovely as many high-priced, imported varieties and is of easy culture.

P. carneum is a perennial, from four to eight inches in height, with a central rootstock, that grows and spreads like a Shasta daisy. It dies down to the ground in the fall, but starts putting up the little leaves and stems when spring comes. Much-branched stems from six to eighteen inches long grow out at an angle from the root. The leaves are delicate and fern-like.

The flowers are a beautiful shade of salmon pink. The petals are thin and almost transparent. The flowers are much larger than those of P. occidentale, measuring about one and one-half inches across. They are borne in large, airy clusters on the ends of the stems, from late spring to late summer.

## J. E. CONARD.

J. E. Conard, president of the Oklahoma Nurserymen's Association, is the senior member of the firm of J. E. Conard & Son, Stigler, Okla.

Mr. Conard, who was born in Iowa in 1876, went to Oklahoma and located at Stigler in 1912, establishing a nursery business under the name J. E. Conard. His son Leo joined him in conducting the nursery in 1924, and the business has since been operated as J. E. Conard & Son.

The firm specializes in growing large quantities of stock, carrying on a wholesale trade. Over 300 acres are devoted to plantings of nursery material at present, this extended development being the result of steady growth in the demand for the firm's products. Considerable propagation work is done by the nursery.

# The Nurseries of Texas

***Location and Specialties of Nurseries Represented in Texas Association of Nurserymen — By Miss Wilma Gunter, Chairman, Publicity Committee.***

The horticultural industry occupies a prominent place in the state of Texas, which has a large number of nurseries within its borders. The membership of the Texas Association of Nurserymen represents a good percentage of them. Through the courtesies of the members of this association this article is presented. It is confined to the membership of the Texas Association of Nurserymen. More detailed information is available regarding those who supplied data to the writer than regarding those who did not respond to the request for information.

There is so much to tell about each and every one of these nurseries that it will be impossible to repeat in detail some interesting facts; however, briefly I am taking you for a tour of some of the nursery establishments throughout the state, and wish that we might spend more time with them all. One and all of these personally invite all nurserymen who visit Texas to stop for even a short visit. The true hospitality of the south is extended by each of these—check your routings according to the nursery locations and call on those along your route.

### At Sherman.

At Sherman is the Texas Nursery Co., operated by C. C. Mayhew, president. This firm had its beginning in the late 60's, when E. W. Kirkpatrick began growing fruit trees. In 1899 connection was made with C. C. Mayhew and J. R. Mayhew. The company's progress has been steady, its capitalization increasing from $10,000 to $250,000. Its acreage has increased from a few acres to more than a thousand. Millions of trees and plants are grown each season. The Texas Nursery Co. has production nurseries located at Colbert, Okla.; Pottsboro, Tex., and Tyler, Tex., in addition to its home place at Sherman.

E. L. Baker.

The Sherman Nursery Co., at Sherman, operates as the retail department of the Texas Nursery Co. and extends a retail landscape service over north Texas.

The John S. Kerr Nursery Co., likewise at Sherman, was originated by Mr. Kerr, who served this industry for more than a half-century. Since 1933 the firm has been under the management of J. V. Smith and H. G. Tucker, the former having been associated with the firm since 1902 and the latter having been reared among orchard and nursery development. The Kerr Nursery Co. has something like 100 acres planted to young evergreens, shade trees and blooming shrubs. While heretofore operating a retail business, Mr. Smith states that, with increased stock and better facilities, the company will begin serving the wholesale trade.

### At Fort Worth.

At Fort Worth is Baker Bros. Nursery, owned and operated by J. B. Baker and his sons, Edward L. Baker and Robert Baker. Edward L. Baker is general chairman of the convention arrangements committee. This firm occupies many acres and produces ornamental trees and shrubs, also a quantity of lining-out stock.

The Trauernicht Nursery Co., Fort Worth, is operated by its owner, E. C. Trauernicht. This firm was established in 1922 and has been located at 400 Sylvania avenue during its business career. Mr. Trauernicht specializes in the production of ornamental nursery stock for both wholesale and retail trade, his nursery covering approximately twenty acres.

The Tarrant County Rose Society, of which Holly B. Hampton is president, is affiliated with the American Rose Society and has a rose garden at 4501 Dallas pike, containing 3,000 roses and a fine collection of irises. This society plans and plants rose gardens and irises, and encourages better plants and better gardens for Texas.

At Arlington is the O. S. Gray Pecan Nursery, owned and operated by O. S. Gray, who is an enthusiast on pecan orcharding and conducts considerable experimental work along that line. Arlington is midway between Dallas and Fort Worth.

Along the Dallas-Fort Worth pike, you will find the H. E. Cannon Nursery & Floral Co., Arlington. H. E. Cannon will take great delight in showing visitors his evergreens, roses and miscellaneous stock. The office and greenhouses are located along the highway.

### At Dallas.

Near Dallas is the Texas Nursery Co. establishment under the management of A. B. Mayhew, brother of C. C. Mayhew, of Sherman. This nursery is located near Irving, which is several miles from Dallas. A large acreage is devoted to ornamental trees and shrubbery.

The B. E. Williams Floral & Nursery Co. is at 4301 Lemmon avenue, Dallas. Mr. Williams operates a retail landscape service, specializing in fine roses and perennials. He was the first to operate a year-around retail service in Dallas, beginning in 1929.

At Gainesville is the Highway 5 Nursery, owned and operated by Walter T. Proffer.

At Greenville is the establishment of E. D. Barlow, Florist, operating a retail landscape service and producing a quantity of lining-out stock in addition to conducting a large florists' business.

At Farmersville is the firm of Hendrix & Glass, under the management of Lige Glass. He specializes in growing lining-out stock and greenhouse flowers for the general nursery and florists' trades. He also conducts a general retail landscape and florists' service.

At Wichita Falls is Downing's Wichita Nursery, owned and operated by N. H. Downing. Mr. Downing also has a nursery near Bowie and specializes in ornamental trees and shrubbery.

### At Tyler.

At Tyler is the Texas Pecan Nursery, Inc., owned and operated by R. W. Fair, president, and W. V. Henson, vice-president. This firm's beginning came from an investment of $25, made by Mr. Fair twenty-two years ago in a few pecan trees. Today the firm is one of the world's largest pecan nurseries. Mr. Henson, manager of the firm, is a native east Texan.

The Dixie Rose Nursery, in which Mr. Fair and Mr. Henson are interested, is likewise at Tyler. A. F. Watkins is manager of the nursery and has to his recent credit the introduction of the Texas Centennial rose.

The Rosemont Nursery, Tyler, of which L. H. Thompson is owner and manager, produces a large quantity of roses, both for local distribution and quantity shipments.

J. M. Ramsey.

The Rose Hill Farm, Tyler, owned and operated by J. A. Bostick, specializes in quality rose products and increases its output from year to year.

**In East Texas.**

The Terrell Nursery Co., at Terrell, is operated by H. L. Stallings. This firm was established in 1892 and grows a general line of nursery stock, at present having approximately eighty acres planted.

At Jacksonville is located the G. A. McKee Nursery, which was established by the late G. A. McKee, Sr., in 1874. The firm produces a general line of nursery stock, including fruit trees and roses. In addition to the nursery, you are invited to visit Love's Lookout state park at Jacksonville. The first amphitheater of east Texas and a fine swimming pool have been recently added to this park.

At Henderson is the Rusk County Nursery under the management of J. T. Ross. With the development of rose growing, this firm has added an increased stock of roses. The erosion difficulties are controlled by hay crops, and a better crop is produced with this aid to cultivation.

At Scottsville is the Verhalen Nursery Co., established in 1905. The active management of the firm is now under the direction of George F. and Ray P. Verhalen, with the constant guidance of their retired father, S. J. Verhalen. The crop produced by this firm is of a varied nature, occupying approximately 500 acres. This crop is divided approximately as follows: 100 acres to roses, 100 acres to narcissus and other bulbs, 75 to 100 acres to broad-leaved and coniferous evergreens, 25 to 30 acres to cannas, and various other blocks of shrubs and stock plants. This firm operates principally a wholesale business, about seventy-five per cent of its trade being north of the Mason-Dixon line.

At Kilgore, immediately north of the rose-growing section and in the hotbed of the oil industry, you will find the shop of Wehrlis Florist, Inc., which Louis Wehrlis opened in February, 1936, of colonial English architecture. This firm operates a complete landscape service in addition to a florists' business.

At Pilot Point is the Pilot Point Nursery, owned and operated by J. Emerson Price for the past twenty-two years. Mr. Price specializes in quality berry plants, though he grows a general line of nursery stock.

Denison is the location of the Carman Nursery, owned and operated by Horace Foster. This firm specializes in a general line of nursery stock for the retail trade and grows a quantity of grapevines.

Winona, near Tyler, is the location of the Shamburger Rose Nursery, owned and operated by T. W. Shamburger. This firm grows a large quantity of roses, both for local sales and shipments to many states.

The Troup Nursery is located at Troup, under the management of I. E. Tackett, growing a general line of nursery stock, but specializing in rose production.

**In South Texas.**

At Beaumont are the Griffing Nurseries, owned and operated by W. C. Griffing and his son, Ralph C. Griffing. This firm specializes in the production of specimen quality nursery stock, not only for local trade, but for shipment throughout the United States. The nurseries occupy approximately 500 acres, planted to a large variety of ornamental trees and shrubs.


# *To Scottsville, Texas and the Verhalen Roses*

**AUTO ROUTE**

Or by train via the Missouri Pacific-Texas & Pacific Railway to Marshall, Texas.

**— SEE —**

**STERLING** (E. G. Hill Co.), striking pink Hybrid Tea; seedling; the rose which is outradiancing the Radiances.

**NELLIE E. HILLOCK** (Hillock), pink Hybrid Tea; seedling; an original new strain of vigorous, disease and weather-resistant roses.

**BLACK KNIGHT** (Hillock), Hybrid Tea; seedling; what the name implies.

And 600 acres of other roses, shrubs and evergreens.

## VERHALEN NURSERY COMPANY

**Scottsville, Texas**

*American Association of Nurserymen Convention, Dallas, Texas, July 21, 22, 23, 1936, and Texas Centennial Exposition.*

# CONVENTION NUMBER

## AMERICAN NURSERYMAN

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Largest general nursery stock in Texas

## Dallas Convention Visitors:

You are cordially invited to visit the famous Locke Poteet Nursery, Poteet, Tex., 30 miles south of San Antonio, Tex., via Palo Alto Road. Many unusual evergreens, roses, pecans and other stock. "Texas' most interesting pecan orchard."

W. C. Griffing.

Mr. Griffing is celebrating his golden anniversary this year, having started the Griffing Nurseries in 1886 near Jacksonville, Fla. His present operations are confined to nursery headquarters at Beaumont, with a branch sales office at 1801 Main street, Houston, where the modernistic office and garden mark a beauty spot in the downtown area of the city. The firm renders a complete landscape service in Houston, where Miss Wilma Gunter has assumed the management.

In Houston is the Teas Nursery, under the management of Edward Teas, Sr., with several sons assisting. This firm specializes in retail landscape work and has been located in Houston for a long period of years.

Camazar Gardens, operated by Mrs. Thomas Bell Foster, at Houston, carries a complete line of azaleas, camellias, roses and rare plants. Thomas Bell Foster is associated with this firm as landscape architect.

At Genoa is the Japanese Nursery Co., owned and operated by S. Arai. This firm specializes in a general line of landscape material and grows considerable lining-out stock. It maintains a sales office in the city of Houston.

At Beeville is the unique establishment of the Marye May Flower Garden, owned and operated by Mrs. Bess McKinney. While Mrs. McKinney's principal business is flowers, she has a number of landscape jobs to her credit. This firm has been operating for the past seven years and from a small beginning has come to enjoy a flourishing nursery and florists' trade.

At Harlingen are the Fritz Nurseries, owned and operated by J. J. Fritz. This firm has been operating for forty-four years in nursery and orchard work. For successful orcharding, Mr. Fritz strongly recommends full understanding of fertility, moisture and humus control. The citrus orchards planted and developed under Mr. Fritz's supervision are attractive in this section.

The Yoakum Nursery & Floral Co., at Mission, operated by Frank Yoakum, grows a general line of nursery and floral stock.

### At Austin.

Austin, which is the capital of the state, is the location of several of the nurseries in central Texas.

Here is Ramsey's Austin Nursery, now under the management of J. M. Ramsey, president of the Texas Association of Nurserymen. The nursery is located within the city limits of Austin, and Mr. Ramsey conducts a general retail landscape business.

Howard's Montopolis Nursery is owned and operated by Eugene Howard, having a number of acres devoted to ornamental landscape stock.

Alff the Florist, likewise in Austin, has a range of greenhouses in addition to his line of nursery stock.

The Travis Howard Nursery, owned and operated by Travis Howard, conducts a local retail landscape service.

W. H. Custard, also in Austin, conducts a retail landscape service.

### At San Antonio.

At San Antonio is the Lingner Nursery & Floral Co., owned and operated by Gus Lingner, who specializes in specimen quality landscape material.

The San Antonio Nursery Co. is owned and operated by Myer Myers, who grows a general line of nursery and floral stock.

The Edward Knox & Son Nursery conducts a complete landscape service. Edward Knox started this firm and is still active in the business, with his son, George Knox.

The San Antonio Evergreen Nursery, owned and operated by Frank Willis, produces a general line of nursery stock, specializing in native shrubs.

The Edward Bell Nursery conducts a general retail business.

The Solo Serve Nursery, owned and operated by I. Brenner, handles a general line of landscape and floral products.

### In Central Texas.

At Pleasanton is located the B. B. Gillett Nursery, which has a general retail trade.

Edward Teas.

C. C. Mayhew.

At Center Point is the Mosty Bros. Nursery owned and operated by Lee Mosty, who produces a general line of ornamental trees and shrubbery. Mr. Mosty has a large acreage of stock for both wholesale and retail distribution. Harvey Mosty owns and manages the nursery located at Kerrville, a few miles from Center Point, and likewise has a general line of nursery stock.

At New Braunfels is the Locke Nursery & Floral Co., under the management of Mr. and Mrs. Herman C. Locke. This firm was established by Otto Locke, Sr., in 1882. One of this firm's introductions is the Bonita arbor-vitæ. The firm is nationally known for its large shipments of bluebonnet seeds. It conducts a retail nursery and landscape business in addition to a flower shop.

At Somerset is the Hoffman Nursery & Floral Co., under the management of Frank H. Hoffman, doing a retail business in an assortment of nursery products.

In Waco is the B. H. Derrick Nursery & Floral Co., under the management of B. H. Derrick. This firm has a large range of greenhouses, conducting a florists' business besides producing a quantity of lining-out stock and landscape material.

At Corsicana the Clowe Floral & Nursery Co., under the management of H. A. Clowe, conducts a general landscape business in addition to a complete florists' establishment.

The Little Nursery Co., likewise at Corsicana, is under the management of J. Walter Little. Mr. Little originated the Mary Jane peach, named for his daughter, which has great possibilities throughout the southern area. Mr. Little conducts a general retail business and specializes in landscaping.

### In West Texas.

The Wolfe Pecan Nursery, at Stephenville, is owned and operated by Ross R. Wolfe, who began business in 1919 after an extensive study of pecan varieties, seed stocks and general soil conditions. While he still specializes in pecans, several types of walnuts, evergreens and fruit trees have been added to his crop production. This year 120,000 peach seedlings were added. The unique office building erected by Mr. Wolfe deserves mention, "The House That Time Built,"

having been constructed from rock collected in seven countries and almost every state in the Union.

The Fitzgerald Nursery, at Stephenville, is owned and operated by J. Fitzgerald, who reports the addition of a block of 100,000 peach tree buds this year. This enterprise has grown from a small berry patch to a 300-acre nursery.

The Whiteside Nursery Co. is at Lubbock, on the southern plains of the northwest. J. H. Whiteside, owner, has specialized in developing a nursery crop of Chinese elms. A large assortment of shrubbery and fruit trees has been added.

The Lubbock Nurseries, operated by Laverne Kershner, were established in 1928. It is only with the assistance of wells that nursery crops are grown in this area. This firm is located between the state experimental farm and the Texas Technical College, and coöperates with both establishments in experimental development.

At Cleburne is the Creed Friou Nursery. It specializes in berry plants while handling a general line of nursery stock. Creed Friou is the owner.

At Brady the Striegler Flower Shop, operated by S. J. Striegler, does a general nursery and florists' business.

At Del Rio the Frank E. Stiles Nurseries, under the ownership of Mr. Stiles, do a general landscape and nursery business.

At Haskell the Conner Nursery & Floral Co., operated by Charles M. Conner, does a general nursery and florists' business.

The Bowman Nursery, under the management of J. E. Bowman, at Plainview, engages in the general production of shade and ornamental trees especially adapted to the plain section.

At Ysleta is located the Farnsworth Nursery, under the management of H. G. Farnsworth, carrying a general line of nursery stock.

## HOSTS AT DALLAS.

### Reception Committee Appointed.

W. C. Griffing, of the Griffing Nurseries, Beaumont, Tex., who is chairman of the reception committee for the convention, is asking all nurserymen of Texas and the great southwest to join his committee in extending a big welcome to all visitors who attend the Ameri-

J. V. Smith.


# BOBBINK & ATKINS

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**MAKE THIS SPECIAL OFFER**

**Taxus Cuspidata Capitata** (Upright Japanese Yew). The Japanese Yews we offer are of true upright form, each tree producing a leader. They are the hardiest and best evergreens for hedges; and for situations where they must remain for many years with little attention, their value cannot be overestimated. They may be sheared to almost any form desired. We have the largest single block specially grown for hedging purposes in the U.S.A.

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| 2-2½ feet | $15.00 | $125.00 |
| 2½-3 feet | 20.00 | 165.00 |
| 3-3½ feet | 22.50 | 200.00 |
| 3½-4 feet | 35.00 | 325.00 |
| 4-4½ feet | 50.00 | |
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Available in specimens up to 8 feet.

**Koster's Blue Spruce.** This is the true grafted variety, which will not turn green. It shows a definite and enduring blue color.

| | Each | Per 10 |
|---|---|---|
| 3-3½ feet | $ 5.50 | $ 50.00 |
| 3½-4 feet | 6.50 | 60.00 |
| 4-5 feet | 8.00 | 75.00 |
| 5-6 feet | 11.00 | 100.00 |
| 6-7 feet | 14.00 | 130.00 |

Prices for larger sizes sent on application.

**Pieris Japonica** (Japanese Andromeda). Dwarf, bushy shrubs, bearing, both summer and winter, long panicles of buds, brownish-red in color, which develop into white flowers in the spring. Small dark green leaves.

| | Each | Per 10 | Per 100 |
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| 1½-2 feet, bushy plants | $2.00 | $17.50 | $150.00 |
| 2-2½ feet, bushy plants | 3.00 | 27.50 | 250.00 |

**Also specializing in Large-Flowering Clematis, Magnolias, Azaleas, Roses, Lilacs, Grafted Named Hybrid Rhododendrons, Evergreens, Perennials, Shade Trees, and many Rare and Unusual Plants.**

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# Quality Stock in Quantity

500,000 **EASTERN-GROWN ROSES,** including **Hybrid Tea, Hybrid Perpetual, Polyantha** and **Climbing Roses** of all the more popular, older varieties, also a wonderful assortment of newer sorts, all budded on that best of all understocks, Rosa Multiflora Japonica.

**CALIFORNIA PRIVET,** 2 years old, cut back when 1 year old; hence extra bushy and fine; also 3-year-old plants, twice cut back, hence carrying a great number of strong, bright branches.

**AMOOR RIVER NORTH PRIVET,** 2 years old, cut back at 1 year old; consequently extra bushy and fine.

**BERBERIS THUNBERGII,** 2 years old, stocky seedlings; also 3-year transplanted plants of all grades.

**AZALEAS,** almost all the more popular, hardy and semihardy varieties.

**EVERGREEN TREES** in splendid assortment, including a very large supply of **Biota Aurea Nana, Juniperus Stricta** and **Colorado Blue Spruce.**

## LESTER C. LOVETT

**DIAMOND STATE NURSERIES**

**Milford, Del.**

## CHINESE ELM SEEDLINGS

Now booking orders for our thoroughly matured, true, hardy North China strain of Chinese Elm seedlings. We specialize in them and know how to grow right and grade right. Carload rates to some point near you.

**WASHINGTON NURSERIES** **Toppenish, Wash.**

can Association of Nurserymen convention at Dallas, July 20 to 24.

The personnel of his committee is named as follows:

C. C. Mayhew, Texas Nursery Co., Sherman.
A. B. Mayhew, Texas Nursery Co., Irving.
J. A. Thompson, Rosemont Nurseries, Tyler.
Ray and George Verhalen, Verhalen Nursery Co., Scottsville.
A. F. Watkins, Dixie Rose Nursery, Tyler.
R. Bruce Walley, Walley's Nursery, Corpus Christi.
J. A. Bostick, Rose Hill Farms, Tyler.
Carl Shamburger, Shamburger Rose Nursery, Tyler.
A. T. Potts, Baker-Potts Nursery Co., Harlingen.
J. E. Conard, Conard Nursery Co., Stigler, Okla.
J. Frank Sneed, Sneed Nursery Co., Oklahoma City, Okla.
E. A. McIlhenny, Jungle Gardens, Inc., Avery Island, La.
F. K. McGinnis, 5215 Monticello avenue, Dallas.
George Preston, Lang Floral & Nursery Co., Dallas.
Miss Anna Rotosky, 2404 Lincoln avenue, Fort Worth.
W. A. Shell, San Antonio.
Ralph C. Griffing, Miss Wilma Gunter and Miss Sibyl Gunter, Griffing Nurseries, Beaumont.

**Consult the Committee.**

Mr. Griffing has made announcement that his committee will have some one appointed to meet all trains coming into Dallas, and others stationed at the hotels to receive the nurserymen as they arrive and to assist them in getting comfortably located for their stay at the convention. If information is desired as to routings by automobile, his committee will likewise furnish this information.

When you arrive in Dallas, look for a committee member wearing a reception badge. This member will gladly assist you in getting located and advise you of the program activities and entertainment of the convention. Every effort will be expended in assisting every nurseryman to feel at home and get the most out of the convention while in Dallas.

Several young ladies who are quite well acquainted and familiar with nursery activities are assisting Mr. Griffing on his committee—so if the courtesies extended by the nurserymen are not altogether to your liking, consult the young ladies!

## LOVETTS LOSE BABY IN FIRE.

The 2-year-old daughter, Anne Avery, of Mr. and Mrs. Cornelius Vandeveer Lovett was suffocated in the nursery of their home at Little Silver, N. J., June 26, when fire destroyed the house early in the morning. The father is the son of Lester C. Lovett, a past president of the American Association of Nurserymen, and the deep sympathy of the entire industry is extended to all of the Lovetts. Mrs. Maude S. Fish, New York, grandmother of the child, also died, while the mother and father and their older daughter, Julia, escaped through dense smoke.

Both children were recovering from whooping cough, and their father was sitting up in the living room to be handy in case they needed help. He smelled smoke about 3:30 a. m. and dashed upstairs to find that the rest of the family had already been awakened. His wife was to take the older child to safety and Mrs. Fish was to carry out the baby, while Mr. Lovett saved what belongings he could.

When he started downstairs, assuming that everyone had previously left the house, he was forced by smoke and heat to retreat and finally escaped through a window to the roof, from where he jumped to the ground. When firemen finally got the fire under control, after nearly an hour, they found the baby and her grandmother on the floor of the nursery.

## A. A. N. CONVENTION PROGRAM.

MONDAY, JULY 20.

9:00 A. M. Registration at secretary's office. Registration fee, $5, includes all entertainment features, including the trip to Fort Worth for the Frontier celebration, tickets to the Texas centennial at Dallas, banquet tickets, etc.

10:00 A. M. Trip to Fort Worth to see Fort Worth's Frontier centennial celebration.

TUESDAY, JULY 21.

9:00 A. M. Convention called to order.
Invocation.
Address of welcome, by J. M. Ramsey, president, Texas Association of Nurserymen, Austin.
Response, by John Fraser, Jr., Huntsville, Ala.
Announcements by the committee on arrangements, E. L. Baker, chairman, Fort Worth.
President's address, by Miles W. Bryant, Princeton, Ill.
Report of the secretary-treasurer, Charles Sizemore, Louisiana, Mo.
Address, "Landscape Development in the Southwest," by R. C. Morrison, city forester, Fort Worth.

12:30 P. M. Men's round-table luncheon, "Southwestern style."
Special luncheon for the ladies, with style show.

1:45 P. M. Address, by Hon. William McCraw, attorney-general of the state of Texas, Austin.
Report of the committee on revitallzation, by Donald D. Wyman, North Abington, Mass., for the executive committee.

8:30 P. M. Annual meeting of delegates from state and regional affiliated organizations to nominate officers and recommend place for next convention.

WEDNESDAY, JULY 22.

9:00 A. M. Session devoted to the discussion of highway plantings.
Address, "Roadsides — The Front Yard of the Nation," by J. M. Bennett, superintendent of parks and forests for the board of county park commissioners, Wayne county, Detroit, Mich.
Address, "Highway Plantings in the Southwest," by Jac L. Gubbels, landscape architect, Texas state highway department, Austin.
Discussion.
Report of Washington contact committee.
Report of committee on federal and state highways.
Report of standardization committee.

1:45 P. M. Special group sessions—The afternoon on the second day of the convention will be devoted to a series of short group meetings to discuss various topics of peculiar interest to special groups of the membership of the association. Each group meeting will be conducted by a special chairman, who will have charge of the program. These group meetings will include:
Landscape contractors — Owen G. Wood, chairman.
Nurserymen selling at retail through agents—E. C. Hilborn, chairman.
Nurserymen selling at retail through catalogues — Chairman to be announced.
Wholesale growers—Chairman to be announced.
Other groups as announced by the program committee.

**Afternoon and Evening.**

Nurserymen's day at the Texas centennial.

THURSDAY, JULY 23.

9:00 A. M. Address, "The Improvement of Varietal Descriptions in Nursery Catalogues," by Dr. A. S. Colby, department of horticulture, University of Illinois, Urbana.
Committee reports.
Report of necrology committee.
Unfinished business.
New business.
Report of nominating committee.
Election of officers.
Selection of place for next convention.
Final adjournment.

7:00 P. M. Banquet and dance.

FRIDAY, JULY 24.

Special trip to the east Texas rose fields. Through the compliments of the East Texas Rose Growers' Association, arrangements have been made to take those attending the convention on a sight-seeing trip to the rose-growing section around Tyler, which will include a tour of the rose fields and a chicken barbecue. Details will be announced at the convention.

* * *

Special tours have been arranged for those who care to see some of the outstanding gardens of Dallas. These tours can be made at any time upon application to the transportation chairman.

There will be a short intermission during each morning session, during which light refreshments will be served by the committee on arrangements.

## FIRST A. A. N. MEETING NOTICE

On the sixty-first anniversary of the American Association of Nurserymen there comes to light an announcement of the first meeting, in the advertising columns of the Prairie Farmer of 1876. A photostatic copy of the page from the Prairie Farmer, supplied by L. L. Kumlien, of the D. Hill Nursery Co., Dundee, Ill., gives a view of this interesting notice. The stated objects make it plain that the primary aims of the original organization were social. Following is a copy of the announcement as it appeared in the Prairie Farmer of 1876:

NURSERYMEN'S CENTENNIAL.

At a meeting of the Nurserymen, Florists and Seedsmen, at Crystal Lake, Ill., Jan. 26th, it was decided to hold a Centennial meeting of all engaged in the trade, in the city of Chicago, on the

**Second Wednesday of June, 1876.**

It has always seemed strange that enterprises of such vast importance have not as yet made any special effort for a national organization. It is hoped that a large attendance can be secured and means devised to better organize and strengthen these great interests.

OBJECT OF MEETING

1st. Relaxation from business.
2d. The cultivation of personal acquaintance with others engaged in the trade.
3d. Exhibition of any new Fruits, Flowers, Plants, or any Manufactured articles, such as Labels, Wire Goods, Berry Baskets, or Implements used in the business.
4th. To exchange, purchase, or sale of Surplus Stock.
5th. To perfect better methods of Culture, Packing, Grading and Sale of Stock.

This will present a favorable opportunity for the exhibition and sale of new varieties of Strawberries, New and Rare Plants, Wooden and Metallic Labels, Lithographs of Fruits and Flowers, Berry Baskets, Wire Goods, Florists' requisites, and the various implements used by Nurserymen. It is expected to obtain reduced rates from all the Railroads and Hotels in Chicago. Any further information can be obtained by addressing:

Dr. John E. Ennis, Clinton, Iowa; L. K. Seofield, Freeport, Ill.; J. S. Stickney, Wauwatosa, Wis.; A. R. Whitney, Franklin Grove, Ill.; Edgar Sanders, Chicago, Ill.; D. Wilmot Scott, Galena, Ill.; Lewis Ellsworth, Naperville, Ill., Committee of Arrangements.

The remainder of the column in the page was devoted to advertisements of nursery stock, varying in size from four lines to about two inches. With few exceptions, the nurserymen advertising on that page in 1876 have passed out of business, but the list of those who used space is interesting:

Dingee & Conard Co., West Grove, Pa.
T. C. Maxwell & Bro., Geneva, N. Y.
Ennis & Patton, Clinton, Ia.
Geo. W. Campbell, Delaware, O.
S. L. Keith, Palatine, Ill.
Musgrove & Mills, Rozetta, Ill.
R. Douglas & Sons, Waukegan, Ill.
Bailey & Hanford, Makanda, Ill.
Joseph Heinl, Jacksonville, Ill.
A. R. Whitney, Franklin Grove, Ill.
Osborn Bros., Benton Harbor, Mich.
Peter McCrane, Bloomington, Ill.
H. M. Thompson, St. Francis, Wis.
John Wampler, Carthage, Mo., or Dayton, O.
Lee & Son, Minonk, Ill.
R. Hixon, Lanark, Ill.
Hill Bros., Beatrice, Neb.
L. B. Case, Richmond, Va.
D. Hill, Dundee, Ill.
Bushnell & Augustine, Bloomington, Ill.
G. W. Closson, Prairie City, Ill.
W. O. Wollard, Grinnell, Ia.
D. B. Weir, Lacon, Ill.
W. H. Mann & Co., Gilman, Ill.

IN THE New York Herald-Tribune yard and garden conest, which closed July 1, the New Jersey Association of Nurserymen offered a silver trophy to New Jersey entrants for the finest property in each of the first four classes, thus giving many a chance to win an additional award.

BURNETT'S NURSERIES, INC., Dresher, Pa., has taken over half of the former Lane's Nurseries, consisting of fifteen acres on the Limekiln pike just north of town. William A. Burnett, formerly of Port Washington and now president of Burnett's, is planning to develop a seed department.

XUM

## PACIFIC NURSERYMEN'S PLANS.

### For Convention in September.

The Central California Nurserymen's Association will be host to the Pacific Coast Association of Nurserymen at San Jose, Cal., at the combined convention of the two associations September 17 to 19. The meetings will be held in the new $500,000 Civic Auditorium which has just been completed in San Jose.

An instructive and worth-while program of real value is being planned for the 500 nurserymen who are expected to attend from the Pacific coast area. George C. Roeding, Jr., Niles, is chairman of a new division that is planning a program of fun and surprises, which it is expected will enliven the proceedings.

The Ladies' Auxiliary has a special convention committee, consisting of Mrs. R. D. Hartman, San Jose, chairman; Mrs. George C. Roeding, Jr., Niles, and Mrs. G. C. Wallace, San Jose.

### Convention Committees.

On the convention committee are Clarence G. Perkins and W. B. Clarke, San Jose; George Budgen, Berkeley; H. Plath, San Francisco; Walter A. Hoff, Palo Alto; George C. Roeding, Jr., Niles; Toichi Domoto, Hayward, and James R. Crombie, Oakland, who are serving under the chairmanship of R. D. Hartman, San Jose, president of the Pacific Coast Association of Nurserymen. Merrit A. Vinson, Burlingame, is acting as secretary.

George C. Roeding, Jr., is chairman of trade displays, and H. Plath is in charge of plant displays. It is expected there will be interesting exhibits in both groups.

Attendance is not limited to members of either association. Invitations are being sent to over 1,500 nurserymen in Utah, Nevada, Idaho, Washington, Oregon, California and British Columbia.

The next meeting of the convention committee was scheduled for July 10, when J. D. Meriwether, chief of the bureau of nursery service of the California department of agriculture, Sacramento, and Henry W. Kruckeberg, secretary of the California Association of Nurserymen, with headquarters in Los Angeles, were expected to be present.

## KENTUCKY SUMMER MEETING.

The summer meeting of the Kentucky Nurserymen's Association will be held Monday, August 3, at the Irvin Cobb hotel, Paducah.

The morning session will be occupied by reports, discussion and two addresses by speakers to be selected.

After luncheon, cars will leave the hotel at 1 p. m. to view the proposed Alben Barkley (Riverside) park, in Paducah, and to visit the "Ancient Buried City" at Wickliffe. They will return to Paducah in time for an old-fashioned barbecue at 6 p. m. on the lawn of the Yopp home. An address will be given there by Otto A. Rothert, secretary of the Filson Club, Louisville, Ky.

The Kentucky nurserymen have an energetic leader in their president, M. J. Yopp, proprietor of Yopp's Nursery and also of the Yopp Seed Co., Paducah. Because of the latter connection, he was president of the Southern Seedsmen's Association in 1931 and he is now president of the Kentucky Seed Dealers' Association, as well as head of the nurserymen's organization.

"PAINESVILLE NURSERIES"

THE STORRS AND HARRISON CO. ESTABLISHED 1853 TREES PLANTS SEEDS PAINESVILLE, OHIO. TRADE MARK

Complete Nursery Supply

Our supply is adequate, in quality stock, covering these important departments:

Fruit Trees
Deciduous Trees
Evergreen Trees
Shrubs
Vines
Evergreen Shrubs
Roses
Small Fruits
Hardy Perennials
Greenhouse and Bedding Plants
Bulbs and Tubers
SEEDS

*82nd Year of Dependable Service*

The Storrs & Harrison Company
PAINESVILLE, OHIO

Large General Assortment of Nursery Stock

We carry a complete line of Fruit Trees, Small Fruits, Fruit Tree Seedlings, Forest Tree Seedlings, Ornamental Shade Trees, Ornamental Shrubs, Roses, Evergreens, Vines and Perennials.

***Send List of Wants for Prices.***

SHENANDOAH NURSERIES
A. F. Lake, *Pres.* — Shenandoah, Iowa — R. S. Lake, *Sec.-Treas.*

WILLIAM F. FISCHER, landscape gardener, Pinoak, Pa., has purchased a 140x150-foot tract of land at Reno, Pa., on which he will establish a nursery.

WALTER J. CHOLTON has established the Holt Avenue Nursery at 1065 Holt avenue, Pomona, Cal.

THOMAS L. PECK, for many years with Peter Henderson & Co., Philadelphia, has recently joined the staff of Bobbink & Atkins, Rutherford, N. J., as advertising and catalogue man.

## ROSE SOCIETY MEETS.

### At Des Moines, Ia.

The summer meeting of the American Rose Society was held at Des Moines, Ia., June 26 and 27, in connection with the Iowa Rose Society's annual rose show.

At a meeting of the trustees held June 26, Cleveland, O., was selected for the summer meeting to be held in 1937.

Announcement being made that Cornell University intends to undertake studies of rose understocks, it was voted to give this subject all the support possible, as it was felt that the matter of understocks is one of the most important questions yet to be decided in connection with American garden roses.

The new John Cook medal which was awarded to L. B. Coddington last fall for his rose, President Herbert Hoover, was presented at the afternoon meeting. In Mr. Coddington's absence, the medal was accepted by the secretary.

Dr. J. Horace McFarland gave one of his splendid illustrated talks on roses, showing a number of slides of the newer varieties. M. H. Horvath, one of the trustees, gave an interesting talk on "Hardiness, Both Present and Future."

At the banquet in the evening, there were a number of 5-minute speeches by members from the various states; fourteen states were represented, including the three Pacific coast states and as far east as New York.

Saturday, June 27, was devoted to garden pilgrimages, luncheon at the home of Better Homes and Gardens and a visit to the state college at Ames, where the work was explained by Prof. E. C. Volz, and Prof. T. J. Maney showed and explained several seedlings which he has produced. Two of these thornless rose understocks seem to be rather important. They are now under test commercially. Others which are extremely hardy and have quite good flowers seem to have possibilities as decorative plants for the colder sections of the country.

### Iowa Society's Show.

The Iowa Rose Society, in spite of the fact that the best bloom had been over for several days, staged a splendid rose show. This was made possible by the quantities of material received by air mail and express. The outstanding exhibit of the show was a collection of some seventy varieties of roses from Portland parks' rose gardens, Portland, Ore. This exhibit contained large vases of some of the newer varieties, and one which was especially attractive was the new red rose, Victoria Harrington, which made its appearance last season. Other exhibits received by air were from Del Monte, Cal.; Chehalis, Wash.; Little Compton, R. I., and Minneapolis, Minn. An exhibit from the Conard-Pyle Co., West Grove, Pa., did not arrive until late in the day, but was shown during the evening.

Prof. N. E. Hansen, Brookings, S. D., who has been working for many years on fruits and flowers able to resist the severe winter temperatures of the Dakotas, brought forty-three varieties of his hybrid roses, which made an interesting exhibit. He was awarded a special prize for his work.

R. Marion Hatton, Sec'y.

## MINNESOTA FARM DRAWS.

The Minneapolis Horticultural Society held its annual strawberry day at the University of Minnesota fruit-breeding farm at Zumbra Heights a few days ago. Members of auxiliary societies, including the state nurserymen's and florists' associations, received notices of the event. Among the visitors were Bj. Loss, Lake City, president of the state nurserymen's association; W. M. and Mrs. Woods, Castle Rock; Senator and Mrs. Mike Cashman, Owatonna; Gordon Bailey, of the Bailey Nurseries, Newport; F. M. Turner, landscape gardener, and family, Red Wing; Charles Nordine, of the Jewell Nursery Co., Lake City; Henry Rosacker, Minneapolis; F. M. Schwab, veteran fruit grower of Mankato; John and Howard Andrews, of the Andrews Nursery Co., Faribault; William Hart, Minneapolis; L. J. Langeness, of Lake City Nurseries, Inc., Lake City, and Andrew Kubratowicz, of the Warren Nursery Co., Owatonna.

Mark Thompson, superintendent of the northeast experimental station, Duluth, in response to a request from the president of the society gave a brief talk on hardiness and requirements for plant materials in his section. Bj. Loss, the first speaker, urged the necessity of extended trials for all new plants and fruits before being sent out or propagated in large numbers. The speaker referred to several varieties whose inability to stand up or produce under Minnesota conditions had been proved by longer trials.

Prof. W. H. Alderman, the head of the division of horticulture, agreed with the speaker and referred to the latest apple variety to be named and recommended. Beacon, the apple referred to, is one of a batch of seedlings raised twenty-eight years ago. Ben Dunn, president of the Minnesota Fruit Growers' Association, brought up from his fruit farm at Rochester several varieties of the new government strawberries. Most of the fruits were of enormous size and fair to good producers and all were highly colored and grown without irrigation. Mr. Dunn mentioned that the state fair will see this year a large collection of every kind of fruit produced by members of the fruit growers' association.

## NEW PLANT PATENTS.

Rummler, Rummler & Woodworth, patent lawyers of Chicago, have announced that the following plant patents on roses were granted June 9:

No. 179. Rose. Edward Richard Asmus, Closter, N. J. A new and distinct variety of hybrid tea rose, characterized particularly by its hardiness and disease resistance and its prolific production of large flowers having distinctive coloration and color changes.

No. 180. Rose. Walter L. Armacost, Los Angeles, Cal., assignor to Armacost & Royston, Inc., Los Angeles, Cal. A new and distinct variety of rose, characterized by its presentation of a rich, variegated, warm orange coloration; the ability of the bloom to retain its beauty of coloration and shape to the point of its withering; its vigorous growth as a bush; its continuous-blooming quality, and its pronounced continuous and pleasing tea fragrance throughout the existence of the bloom.

No. 181. Hybrid tea rose. William B. Murray, Atco, N. J. A variety of hybrid tea rose, characterized particularly by its lack of thorns on the flowering shoots, and other peculiarities of foliage as described, as well as by its large, heavy blooms of a uniform rose to rose-pink color.

No. 182. Rose. Svend Poulsen, Copenhagen, Denmark, assignor to the Jackson & Perkins Co., Newark, N. Y. A new and distinct type of bedding rose, characterized by the hardiness and inflorescence of a true polyantha rose in combination with the bloom characteristics of a hybrid tea and further characterized as to novelty by the color range of the bloom and the resistance of the plant to adverse weather conditions.

The following new plant patents were issued June 16, according to Rummler, Rummler & Woodworth, Chicago patent lawyers:

No. 183. Rose. Robert H. Kistler, Houston, Tex. A new and distinct variety of rose plant of the hybrid tea rose class, characterized by the petals being of a deep rose base color with dots and splashes of white.

No. 184. Pomegranate. Erich C. Trauernicht, Fort Worth, Tex., assignor to Baker Bros. Co., Fort Worth, Tex. A new and distinct variety of dwarf acid pomegranate plant, characterized by its unusually tall and vigorous-growing habit, the largeness of its fruit and the varicolored effect produced during the ripening period of said fruit.

## ROSE GARDEN ON SHIPBOARD.

The new leviathans of the sea are increasingly modern in equipment, decoration and furnishings. And now a rose garden! That is what is reported on board the French liner Normandie by


**It's High Time to Plan Sales for This Fall and Next Spring**

All the facilities of our organization are at the service of plantsmen who wish to increase their sales. We supply

**Accurate Color Illustrations**
**Copywriting Photographing**
**Designing Engraving**
**Printing, Binding, Mailing**

All under one general management. We shall be glad to discuss your problems and plans in person or by mail—and without obligation on your part. When shall our representative call?

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**McFarland Publicity Service** — *Seedsmen's Advertising*
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. . . . . *a good supply of*

**SOUR and SWEET CHERRIES**
**APPLE — PEACH — PEAR**
**ORNAMENTALS — ROSES**

**PRIVET AMOOR NORTH**
**FRUIT TREE SEEDLINGS**
**DECIDUOUS SEEDLINGS**

Write for new **TRADE LIST**, just off the press.

Will appreciate your **WANT LIST.**

**MOUNT ARBOR NURSERIES**
E. S. Welch, Pres. Shenandoah, Iowa
*"One of America's Foremost Nurseries"*

**QUALITY LINING-OUT STOCK**
Seedlings and transplants of 19 varieties of evergreens, maples, nut trees and fancy shrubs for fall delivery.
**MATHEWS-EGGERT NURSERY**
*Wholesale Growers*
342 Apple Ave. Muskegon, Mich. Nursery at Twin Lake, Mich.

**JEWELL Wholesale**
Hardy Minnesota-grown Nursery Stock and Liners
**THE JEWELL NURSERY CO.**
POUCH N
Lake City, Minnesota

**CUMBERLAND VALLEY NURSERIES**
INC.
McMinnville, Tennessee
One-year Apple and Pear, and June-budded Peach.
Ornamental stock and collected native material.
Send your list for special quotations.

**LINING-OUT STOCK**
*Connecticut Valley Grown*
Seedlings - Rooted Cuttings
Evergreen and Deciduous
*Write for List*
**C. E. WILSON & CO., INC.**
Manchester, Connecticut

**HILL'S EVERGREENS**
Complete assortment of lining out sizes
Also larger grades for landscaping
Send for our wholesale catalogue
**D. HILL NURSERY CO.**
EVERGREEN SPECIALISTS
Largest Growers in America
Box 402 DUNDEE, ILLINOIS

**Canterbury Boxwood**
Buxus suffruticosa and B. sempervirens.
Selected uniform plants; bushy and foliaged to center; masses of fibrous roots. Finished specimens from 4 inches up, ready for quick shipment. Prices lower, plants larger. Ask for special list.
CANTERBURY NURSERIES, Inc., Box R, Easton, Md.


Dr. J. H. Nicolas, who took that ship on his biennial rose pilgrimage to Europe in the interests of Jackson & Perkins Co. He writes:

"How great my surprise and delight to find on board a full-fledged rose garden of respectable size and number of varieties. It was in the fo'castle of the ship on the upper deck in a glassed-in semicircle. Large plants of ramblers and climbers in full bloom were trained on trellises and pergolas, and birds were singing to make it even more real. Beds of different polyanthas completed the picture. The attendant in charge told me that the entire garden was done over for each trip from France and a different genus was featured—the next trip was to be hybrid teas and the following Hydrangea hortensis, which has very extended culture in France both for pot plants and outdoor use."

## OREGON HOLLY GROWERS MEET.

There was an animated meeting of the Oregon Holly Growers' Association held in the Oregon building, Portland, Ore., June 23. One of the principal subjects discussed was the possible formation of a coöperative for the grading and selling of holly by this group, according to L. J. Caufield, vice-president.

Some of the members believed that if such a coöperative is established, it should serve only the growers of holly, whereas others felt all members should receive the benefits of such a set-up, even those dealers who depend mostly on private individuals' holly trees for procuring stock for the Christmas trade, etc. The subject will probably be discussed further in a future meeting. There was also a discussion of spraying and marketing. F. E. B.

## DAY'S PROGRAM AT STORRS.

Nurserymen will take part in what is designated as flower and nurserymen's day, July 29, part of the regular farm and home week program scheduled for July 27 to August 1, at the Connecticut State College, Storrs. A tour of the college greenhouses will be the first event of the day, starting at 9 a. m., after assembly at the greenhouses, under the guidance of Roland H. Patch, associate professor of horticulture at the college.

At 10 o'clock a meeting will be called to order in room 260 of the Beach building, with Mrs. Alden Vose, Westport, Conn., president of the Federated Garden Clubs of Connecticut, presiding. E. A. Piester, landscape gardener of the park department at Hartford, Conn., will speak on "Garden Roses in Connecticut." Next, Mrs. Bessie R. Buxton, Peabody, Mass., a horticultural writer, will talk on "House Plants."

The afternoon session will be presided over by Edgar M. Brown, Hartford, landscape gardener and forester. Harlan P. Kelsey, of the Kelsey Highlands Nursery, East Boxford, Mass., will discuss "Roadside Development," while Alex Cumming, Jr., of the Bristol Nurseries, Inc., Bristol, Conn., will talk on "The Development of New Perennials." To conclude the program, the group will be taken on a tour of the college campus after assembly at the front steps of Gulley hall. An exhibit of garden books will be held in the library.


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**ASK FOR NEW ROSE BROADSIDE**
*in four colors*
*showing*
**1936 NOVELTIES**
*and announcing*
**NEW LIBERAL GUARANTEE PLAN**
*on*
**Nationally Advertised Varieties**
**JACKSON & PERKINS CO.**
Newark, New York State

**A. McGILL & SON**
FAIRVIEW, OREGON
*Wholesale Only*
Our usual line of quality nursery stock, including Shade and Flowering Ornamental Trees and Specialties, Fruit Tree Seedlings and Roses.
***Grown Right and Packed Right***
*A card will bring our list of items that will make you some money.*

**C. R. BURR & CO., INC.**
MANCHESTER, CONN.
HEAVY SURPLUS ON SOME ITEMS
**Write for Low Prices**

**Princeton Nurseries**
of PRINCETON, N. J.
SUPERIOR
**Hardy Ornamentals**

**PRIVET and BERBERIS**
**Splendid Stock**
Write for Special Quotations
LESTER C. LOVETT
Milford Delaware

# More Trade Reports

### BETTER AT PAINESVILLE.

The early business was disappointing this past season. The severe long winter curtailed early sales considerably. The general spring business was good and showed an improvement over the previous year every week after the middle of March. Wholesale prices were generally acceptable to the trade, and demand seemed to be for a more general line of stock, which is particularly a favorable indication for the future.

The season was about three weeks late this spring in the Painesville area, and on account of a rather dry spring it was necessary to defer the planting of many items until late. We have had five good soaking rains here in the past week, which were very acceptable after the previous dry season. Fruit trees generally look well, especially our fine blocks of peaches, which are ahead of some blocks in other sections, we are told by a few large wholesalers who have called here recently. Generally the roses look fine. Evergreens are showing fine color. Hardwood cuttings are a wonderful stand. Perennials look fair, although some losses show in seed plantings made early that were not under water. Transplanted grapes are O. K., but it is too early to determine about the cuttings; generally, however, grape cuttings are poor, but the recent heavy rains may change this condition.

There is much less surplus nursery stock. Many old customers are coming back to the legitimate growers, indicating that good material is not available from distressed blocks. There will be less cutthroat competition, and prices will be more stable for a few years. Many established plantings need replacements on account of severe winters and dry summers. With some building activity, coupled with general business upturn, profitable business is there if the nurserymen will go out and get it.

H. S. Chard, Sec'y,
Storrs & Harrison Co.,
Painesville, O.

### STOCK IS GOOD PROPERTY.

Although the extremely cold weather slowed up sales during the winter, the improvement in later spring sales helped to counteract the loss during the zero weather.

With the reduction in supplies of available nursery stock caused by various weather conditions, coupled with the improvement in general business that has already developed and which we believe will go farther after the presidential election, we anticipate at least several favorable years of satisfactory demand and satisfactory prices.

Serious droughts have again cut heavily the stands of nursery stock. This accentuates the already short supply and will make good trees and plants far more valuable. It is our plan to keep these thoughts in mind when preparing price lists and making plans for the coming fall and spring selling campaign.

Good nursery stock right now is better property and is worth more money than for a number of years, and there is an increased demand in sight for all stock now growing. Subzero winter weather, with serious summer droughts and out-of-the-ordinary heat, has caused the loss of many millions of fruit trees in the orchards and on the home grounds, as well as loss of ornamentals which must be replaced and should this season add largely to the average sales.

In addition, there is a decided increase in building homes, which should become more pronounced before the close of the year, thereby creating additional markets for shrubs, shade trees and fruit trees.

With general conditions showing steady improvement and with the presidential election over and out of the way, there will doubtless be a great forward movement in business and an increasing demand for nursery products.

Fruit crops for this season will be under the average, which will mean better prices and better profits, and will also mean more extensive plantings and naturally a better demand for nursery stock. The outlook is encouraging. Nursery stock is good property this year.

Paul Stark, Treas.,
Stark Bros. Nurseries,
Louisiana, Mo.

### LOUISIANA BID TO GRIFFING.

W. C. Griffing, of the Griffing Nurseries, Beaumont, Tex., who recently spent several days in the capital city of Louisiana and New Orleans, received a contract for the highway beautification project which is to be executed near the new Mississippi river bridge at New Orleans. This work calls for a large quantity of evergreen live oak trees, redbuds, magnolias, hardy palms, oleanders and other flowering shrubs.

While on this trip, Mr. Griffing viewed the spacious grounds of the Louisiana state highway commission, for which he furnished considerable landscape material. He called on a number of nurserymen in south Louisiana and personally extended an invitation to attend the A. A. N. convention at Dallas.

### AWARDED CONTRACTS.

The Grand View Nurseries, Mount Vernon, N. Y., have been awarded two contracts for seeding and planting the grounds of two post office buildings, the procurement division of the United States Treasury Department has announced. The Mount Vernon firm has been awarded a contract for $600 to do seeding and planting work at the post office at McDonald, Pa., which must be completed within 180 days, and for a similar job at Kane, Pa., the contract price is $410.

A NURSERY has been opened by Louis Lundquist, Jr., on Croton avenue near Crompond road, Peekskill, N. Y.

500 VARIETIES of IRISES Assorted colors — Retail prices up to $1. $50.00

250 VARIETIES of PEONIES Assorted colors — Retail prices up to $3. $65.00

Have Cash coming in Every Month. Send for Catalogue of 769 varieties of Irises and 513 varieties of Peonies.

C. F. WASSENBERG, VAN WERT, OHIO

**PROFITABLE PEONIES**

Best Varieties. Attractive Prices. Fine Quality Roots, liberally graded. 25th Annual Catalogue ready.

**HARMEL PEONY COMPANY**

Growers of Fine Peonies since 1911

Berlin, Maryland

**TREE PEONIES**

and all other types

New Hybrid Lilacs - Fine Evergreens

*Ask for List*

**The Cottage Gardens**

**Lansing, Michigan**

*"Worth Many Times the Price of the Magazine!"*

That's what several subscribers have said about the 6-page table on **Seed Stratification Practices** in a recent issue of The American Nurseryman.

So many requests for extra copies have come that the four articles by L. C. Chadwick on

**Improved Practices in Propagation by Seed**

have been reprinted in booklet form, at **25 cents per copy.**

Send your order now.

Valuable articles of this type constantly appear in The American Nurseryman. Every grower of, and dealer in, outdoor stock should read it regularly.

One prominent nurseryman said recently: "When I clip the informative items from your magazine for my files, there isn't much left."

Another writes, from California: "I thought it contained little information of value on the Pacific coast, but recent issues have been so very good I feel I really need the publication."

Published twice a month

**Subscription, $1.00 per year**

**AMERICAN NURSERYMAN**

**508 S. Dearborn St. Chicago, Ill.**

10,000 CHERRY, Montmorency and Early Richmond, 2-year, XX and 1¼ inch.
5,000 SPIRÆA, Vanhouttei, 3 to 4 feet and 4 to 5 feet.
25,000 ELMS, American, Vase and Moline, transplanted, up to 4 inches.
10,000 MAPLE, Norway, transplanted, up to 2½ inches.
3,000 ARBOR-VITÆ, Pyramidalis, up to 8 feet.
400 PINE, Mugho, from 2 to 4 feet.
1,000 SPRUCE, Norway, sheared, none better, 3 to 5 feet.
600 JUNIPER, Pfitzer's, 5 to 8 feet spread, beauties.
3,000 ARBOR-VITÆ, American, and RETINOSPORAS, 4 to 7 feet.

Send for list on many other items.

**C. M. HOBBS & SONS, Inc.**
Bridgeport, Indiana
Largest Nursery in Indiana. Established 1875.

Evergreens, Broad-leaved Evergreens, Deciduous and Ornamental Trees, Flowering Shrubs, Barberry, Privet, Hardy Perennials and Rock Plants - - Fruit Trees and Small Fruits - - Lining-out Stock.

**PEACH TREES**
A fine general line, including a large supply of Elberta, Golden Jubilee and South Haven.
*Write for quotations and our Wholesale Trade List.*
**The WESTMINSTER NURSERY**
Established 1893 Westminster, Maryland

**NOTICE TO CATALOGUE NURSERYMEN**
The immense new Boysenberry has demonstrated that it is very hardy and can be grown wherever the blackberry thrives. No bramble has ever sold as this sensational berry is selling. Please catalogue, and we will be pleased to furnish you plants from any one of our 18 plantings from the Atlantic to the Pacific. Send for terms and pictorial circular.
RANCHO VERDAD, Mentone, Calif.

**EVERGREENS**
For Seventy years growers of Quality Evergreens
Lining Out Stock a Specialty
*Write for Trade List*
EVERGREEN NURSERY CO.
Established 1864 : STURGEON BAY, WIS.

**CONTRACT**
with us for your
**PEACH TREES**
Now Booking Contracts for Fall
HOWARD—HICKORY CO.
Hickory, N. C.

**PEACH PITS**
OUR PITS COMPARE FAVORABLY WITH THE BEST
**HOGANSVILLE NURSERIES**
Hogansville, Georgia


## WHITE PLAINS FLOWER SHOW.

Leading nurserymen from New Jersey, New York and Connecticut exhibited in the commercial classes at the fifth annual Westchester county flower show held June 10 to 13 at the county center, White Plains, N. Y. On the terrace in front of the building the Westchester Retail Nurserymen's Association constructed completely landscaped gardens on each side of the main entrance.

Among those having special displays were the Arcadian Rose Gardens, Scarboro; the F. & F. Nurseries, Milburn, N. J.; Daybreak Nurseries, Inc., Westport, Conn.; Herbert Handleman and the Stumpp & Walter Co., White Plains; Sunridge Nurseries, Greenwich, Conn.; Pinchbeck Bros., Inc., Ridgefield, Conn.; E. T. Wyatt, Valhalla, and W. E. Marshall & Co. and Peter Henderson & Co., New York.

Winners in the commercial classes included: For a garden featuring a waterfall, John Dunn, White Plains, first; for a display of garden or nursery plants, Elmsford Nurseries, Inc., Elmsford, first, and Hillside Farm Nurseries, White Plains, and Rosedale Nurseries, Tarrytown, second; for a flower border, W. E. Marshall & Co., first, and Playland, second; for a rose border, Arcadian Rose Gardens, first, and Herbert H. Handleman, second, and for a rose disseminated from 1935 through 1936, John Dunn. A bronze medal went to F. R. Pierson, Inc., Tarrytown, for a new hardy fern. Daybreak Nurseries, Inc., was awarded a special award and gold medal for the best large garden in the show; the display was the largest in the show, though it was not entered in the competitive classes. Judges for the commercial classes were Henry Hicks, Westbury; A. F. Brinkerhoff, New York, and William Vert, Madison, N. J.

Among the firms having booths in the show were: American-Moninger Greenhouse Mfg. Corp., Brooklyn; C. B. Dolge, Westport, Conn.; the Stumpp & Walter Co.; Goulard & Olena, Inc., New York; W. E. Marshall & Co., and O. M. Scott & Sons, Marysville, O.

## DATE PALM QUARANTINE OFF.

The apparent eradication of the date-palm scale has led Secretary of Agriculture Wallace to revoke the federal date-palm scale quarantine (No. 6), effective July 1, 1936. Under the quarantine, which was promulgated in March, 1913, the interstate movement of date palms and date-palm offshoots was regulated from certain areas in California, Arizona and Texas, on account of the parlatoria scale, an injurious date-palm scale insect.

Eradication of this pest, which has been the subject of a vigorous eradication campaign conducted coöperatively by the affected states and the United States Department of Agriculture for a number of years, has apparently now been effected, as intensive inspection of the previously infested areas has revealed no infestation since 1934, the infestation at that time being extremely light. It is therefore believed that domestic quarantine restrictions may be removed with respect to the parlatoria scale with safety to the date-growing areas.


"A friendly, efficient, sales service."
**CANADIAN HEMLOCK**
(Tsuga canadensis.)
Every plant well grown, well transplanted, full and heavy. 250 at 1000 rates.

| | Per 100 | Per 1000 |
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| 3 to 4 ft. | $ 85.00 | $ 850.00 |
| 4 to 5 ft. | 125.00 | 1100.00 |
| 5 to 6 ft. | 200.00 | 1750.00 |

**E. D. Robinson, Sales Agent**
34 South Elm St.
Wallingford, Connecticut.
Send for our Wholesale List.

Up-to-date information on germinating
**TREE & SHRUB SEEDS**
Dr. L. C. Chadwick's articles on "Improved Practices in Propagation by Seed," reprinted from The American Nurseryman.
Price 25c (postpaid)
**HERBST BROTHERS**
92 Warren St. New York, N. Y.
Write for free Tree and Shrub Seed Catalogue containing flower and vegetable seeds attractively priced.

**Milton Nursery Co.**
Milton, Oregon
Maple, in assortment for Parks, Cemeteries, Subdivisions and Landscape Work. Birch in variety, Hawthorn and other Ornamental and Shade Trees.
Seedlings, Fruit and Shade Trees, in assortment.
Ample and Complete Stocks.
*Car lot shipments at reasonable freight rates.*

**OREGON-GROWN ROSEBUSHES**
Send for List
**PETERSON & DERING, Inc.**
Wholesale Rose Growers
SCAPPOOSE, OREGON

**ORENCO NURSERY CO.**
Orenco, Oregon
*Wholesale Growers*
Fruit, Shade, Flowering Ornamental Trees, Fruit-tree Seedlings, Roses, Etc.
*Very complete line of quality stock*

**Latham and Chief RASPBERRIES**
"Mosaic-Free" Plants - Good Roots
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**Small Fruit Plants**
Evergreens — Shrubs
Lining-out Stock
*Send for Complete Trade List*
**SCARFF'S NURSERIES**
New Carlisle, O.

## BULLETINS RECEIVED.

"Plant Propagation by Seedage, Cuttage, Layerage and Separation," an instructive, practical growers' guide of eighteen pages, issued as circular No. 191 of the agricultural experiment station of the University of Missouri, Columbia. The author is T. J. Talbert. The information is simply given and is confined to essential points, a number of illustrations being of additional advantage. Special attention is given to coniferous seedlings, rose plants and house plants.

"Forest Trees and Forest Regions of the United States" has just been published by the forest service of the United States Department of Agriculture, as a simple and convenient source of information on the forest trees of the United States and its territories. The booklet was prepared by Wilbur R. Mattoon, extension forester. The greater part is given over to a list of 810 kinds of native trees in the eastern and western forests of continental United States, together with a notation of the region in which each tree grows, and brief descriptive notes to aid in its identification. There are six natural forest regions in continental United States, two each in Alaska and Hawaii and three in Puerto Rico. Mr. Mattoon lists the forest types composing each of the six regions and discusses the extent of their forests, their timber content and the forest drain and growth in each. Also, the names of the trees in various parts of each region are given in order of their abundance or importance. The publication is liberally illustrated with photographs of various kinds of trees in each section, and with detail drawings of leaves, flowers or fruits, and twigs of some of the most important trees. A map showing the location of the forest regions is included. Copies may be obtained from the Superintendent of Documents, Washington, D. C., at 15 cents each.

"Deciduous Shrubs Suitable for Ornamental Planting in Pennsylvania," by R. P. Meahl and A. O. Rasmussen, issued under date of March, 1936, as circular 162 by Pennsylvania State College, is notable for a table, including about 150 varieties, giving the botanical and common names, height, habit, soil required, suitable exposure, period of blooming, hardiness and color of flowers, fall leaf and fruit, with additional remarks. Lists of shrubs for special purposes and general comments on planting and cultivation likewise add to the value of this 28-page pamphlet.

"Peach and Nectarine Growing in California," by Guy L. Philp and Luther D. Davis, issued under date of March, 1936, as circular 98 of the California agricultural extension service, treats fully in the space of sixty-four pages these important California fruit crops, from the choice of orchard location, its establishment, selection of varieties and propagation to the training of the trees, care of the orchard, control of pests and harvesting of the fruit crop.

"Growing Raspberries and Blackberries in Wisconsin," by J. G. Moore, issued as circular No. 280 of the University of Wisconsin, Madison. The data are suited for both large and small growers of these crops and are comprehensive in scope, covering sites, soils, systems of planting, varieties, pruning, supporting, etc.

"Ornamental Trees," by Charles W. Barr, issued as extension bulletin No. 160 of the Michigan State College, East Lansing. This 64-page illustrated booklet is devoted chiefly to discussions of deciduous trees, listed according to genera. Included as a foreword are brief comments on selecting and placing trees. There are also many excellent half-tone illustrations and lists of trees for special purposes.

"Strawberry Culture in Illinois," by A. S. Colby, issued as circular No. 453 of the University of Illinois, Urbana. Adapted to the home garden as well as to commercial production, strawberries take high rank among Illinois fruits. This 52-page illustrated bulletin is concerned chiefly with data for commercial growing, covering all points from the selection of the site for the berry patch to a discussion of marketing, yields and costs.

## GARDEN LIGHTING DATA.

The many advancements that have been made in the technique of garden lighting are clearly apparent in a descriptive catalogue of equipment for the purpose recently issued by the Kim Mfg. Co., Los Angeles, Cal. Reproductions of artistically designed lighting equipment useful for giving nighttime value to various situations in the garden and other outdoor recreational areas occupy a dozen pages. There are items for use in garden nooks, in plantings, along paths and steps, in pools and fountains, etc. Natural forms—flowers, tree stumps, stones and the like—are followed in fashioning light-concealing units. Garden ornaments are also used effectively. The equipment was devised by an illuminating engineer, it is stated, a prominent sculptor executing the cast bronze designs employed. A supplementary booklet goes into greater detail in answering garden lighting questions.

PAUL VISSBERG, of Hicks Nurseries, Inc., Westbury, N. Y., judged the horticultural classes at the third annual flower show of the Mineola Garden Club, Mineola, N. Y., June 16.

## CATALOGUES RECEIVED.

[In writing for a copy of any of the catalogues reviewed below, please mention that you saw it described in The American Nurseryman.]

**Gardens of the Blue Ridge**, Ashford, N. C.—Catalogue listing hardy American ornamental plants, chiefly nursery stock, but including native ferns and orchids and native herbaceous perennials, with a few rockery plants. Cultural notes on broad-leaved evergreens are given.

**Wassenberg's Peony and Iris Farms**, Van Wert, O.—In covers of a tan leather-appearing paper, with a design of irises and a peony on the front, comes Wassenberg's wholesale catalogue for fall, 1936, and spring, 1937, listing multitudinous irises of various kinds, each group alphabetized, and a great number of peonies.

**The Lily Gardens**, Bellevue, Wash.—"Lilies," folder offering a variety of lilies at retail prices—both bulbs and seeds. Separate is a wholesale list. The firm grows lilies exclusively.

**Quality Gardens**, Freeport, Ill.—Lovely with irises in color and black and white, and with illustrations of the firm's plantings, is the 1936 Quality Gardens catalogue. Mrs. Douglas Pattison, proprietor, records in a foreword that her aim is to offer the cream of the good irises, declaring she cannot even pretend to offer all the good varieties. Besides novelties and rare blooms from various hybridizers, the catalogue contains a general list, also naming a number of hemerocallises which Mrs. Pattison is adding to her offers as fast as she proves them in her own plantings. Additional delights to the pictures are the poetic selections from many authors extolling the iris.

**Lowell Mfg. Co.**, Chicago.—Catalogue No. 36, "Lowell Quality Sprayers," lists hand and compressed-air sprayers, dusters, pumps, wheelbarrow spray outfits and electric units to apply paint and insecticides. Also offered is poultry equipment. The catalogue contains illustrations of practically everything listed.

**Orenco Nursery Co.**, Orenco, Ore.—First section of a price list, the rest to be published in September. Fruit, nut and ornamental trees are included in the 20-page catalogue. Also, berries and roses are listed. There are several illustrations of the firm's various plantings.

**Joseph B. Gable**, Stewartstown, Pa.—Folder listing rhododendrons and azaleas, with a fine half-tone of Rhododendron racemosum on the cover. Plants of rare hollies are also offered.

**Pfeiffer Nursery**, Winona, Minn.—Wholesale price list of peonies and irises. Included are two collections of florists' cut flower peonies, also a few hardy perennials. There are three illustrations of the firm's plantings, plus a half-tone of an iris.

**A. M. Grootendorst**, Benton Harbor, Mich.—Peonies, dahlias, hardy phlox and Michigan-grown bulbs are offered by Mr. Grootendorst in a folder liberally illustrated by half-tones that, though small, are excellent.

**Oberlin Peony Gardens**, Sinking Spring, Pa.—Alphabetized list of 150 varieties of peonies of various types, especially tree peonies. The folder is illustrated and also offers Tritoma Pfitzeri. Separate sheets include a general wholesale list, a bargain list and a wholesale list of tree peonies.

**W. B. Clarke & Co.**, San Jose, Cal.—Two mimeographed sheets listing bush, climbing and tree roses. Plans for deliveries in spring to eastern buyers are explained.

RUBBER BUDDING STRIPS } . . For Budding and Tying
RAFFIA . . . . . }
BAMBOO CANE STAKES . . . . . For Staking
NURSERY SUPPLIES . . . . . Full Line
*Write for Prices on above, also for General Bulletin*
THOMAS B. MEEHAN CO., Dresher, Pa.

WOOD LABELS for Nurserymen
DAYTON FRUIT TREE LABEL CO.
South Canal Street DAYTON, OHIO

LABELS FOR NURSERYMEN
THE BENJAMIN CHASE COMPANY
DERRY, N. H.

**Save your Cedars**

To control red spider mites and cedar-apple rust, spray with Linco **Colloidal Sulfur**, the most effective of many fungicides recently tested by the Arnold Arboretum. First application, July 1.

1 qt., $1.50 } postpaid in
1 gal., $3.00 } New England
5 gals., $12.50
(f.o.b. Boston)

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COLLOIDAL SULFUR
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SOLE MANUFACTURERS:
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POROUS HOSE IRRIGATION
*PROTECTS YOUR STOCK*
Simplest means of insuring adequate distribution of water. Quickly installed. Easily moved. Inexpensive and durable. Controls and conserves water. Suitable for any size planting. Excellent for use between nursery rows.
FIVE DAYS' TRIAL. Your money refunded if not satisfactory. The dry weather is here! Write for facts TODAY!
OOZO, Inc., Dept. LP, Howell, Mich.
IRRIGATING HOSE

**SHINGLETOW**
Baled White Cedar Shingletow Stock on hand for Immediate Shipment. Write Us for Prices.
**RODDIS LUMBER and VENEER CO.**
**Marshfield, Wisconsin**

**SPHAGNUM • MOSS •**
*Carlots or less, write*
**WISCONSIN MOSS CO.**
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Nursery and Florist
**SPHAGNUM MOSS**
New Crop. The largest size bales about 6 cubic feet per bale. Wire or burlap bales. The oldest moss dealer in the state. Our reference—Dun & Bradstreet, Inc.
THE MOSS CO., MATHER, WIS.

**ELECTRIC PENCIL**
Burns Letters Into Wood *Only* $1.00 Postpaid
Makes Permanent Record Tags for Plants, Trees, Shrubs, Etc.
EASY AS WRITING WITH A PENCIL
Will not rub off. Will not wash off. Will not fade out.

Fully guaranteed
QUALITY MERCHANDISE CO. 2336-4 Lincolnwood Drive Evanston, Ill.


### TO BEAUTIFY RACE TRACK.

The Laguna Plant & Seed Co., Maywood, Cal., has been given the task of landscaping the Santa Anita race track by the directors of the Los Angeles Turf Club. They wish to have the property covered with masses of brilliantly colored flowers before the opening of the racing season next Christmas day. The plants, therefore, must be in full bloom at a time of year when they are difficult to obtain and maintain in bloom.

The plans call for a sunburst design at opposite ends of the field, measuring five acres at each end, to be planted in brilliant yellow, deep orange and bright blue, requiring more than 1,500,000 giant-flowered calendulas. Petunias, lobelias and other plants will bring the total number to well over 3,000,000. The design will be tied to a huge centerpiece of blue in the center of the field, imbedded in a 4-acre rectangle of white and gold.

Across the field on an embankment directly opposite the clubhouse and grand stand will be a strip of flaming crimson more than half a mile long and fifty feet wide. Beds of giant pansies in separate and mixed colors will be planted in every conceivable place so that no matter where the visitor turns he will see these flowers at close and long range. It will require about a half-million pansy plants, planted six inches apart each way. For the lawn areas, which will cover more than thirty-five acres, five tons of grass seed will be used.

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BERT KALLMAN held a formal opening June 13 and 14 of Kallman's Garden Nursery, 1137 Coast highway, Santa Barbara, Cal. He plans to give up the Laguna Nursery, which he has operated for four years at 1940 Laguna street.

A SHOWING of flowering and evergreen shrubbery was provided by the Puget Sound Nursery, Tacoma, Wash., June 17 and 18 at the annual show of the Tacoma Rose Society. The Tacoma Seed Co. had a professional rose exhibit.

IN THE Sioux Falls, S. D., home grounds contest and flower show, June 6 and 7, the Black Hills Seed & Nursery Co. presented a 2-foot Black Hills spruce and the Wahoo Lodge Gardens gave a specimen spruce tree and two choice peony roots as special prizes.

ABOUT four and one-half acres of property of the former American Rose & Plant Co., Springfield, O., comprising greenhouses, yards and an office building, were sold at public sale June 20 to the Lagonda National bank for $13,467, as a result of a foreclosure suit.

A BID of $13,395 for planting trees, shrubs and lawns and installing a water system at the Fifth street plaza of the San Francisco-Oakland bay bridge approach, submitted by the California Nursery Co., Niles, Cal., was considered June 4 by the state department of public works.

AT THE recent meeting of nurserymen at Salem, Ore., the Multnomah county agricultural agent reported that the nursery industry in Oregon has expanded to a point where it now surpasses mining and fishing in the amount of money brought into the state. About $3,000,000 worth of nursery stock is produced annually in Oregon, eighty per cent being shipped to other states and to foreign countries.


**KILL WEEDS . . . . *with FIRE***
**Aeroil Burner** positively kills ALL weeds—once and for all! Used by thousands of practical nurserymen, gardeners and florists to sterilize soil, burn tree stumps, destroy insect pests, fungus and 101 other uses. Easy to use, economical.

ABSOLUTELY SAFE!
One-year guarantee. Write for Free Folder 183N.
AEROIL BURNER CO., INC.
WEST NEW YORK
NEW JERSEY
FREE TRIAL

**PERFECTION MARKERS**
will designate your stock with elegance, assurance and economy.

Made of galvanized steel, finished green baked enamel. Card fully protected yet always in full view.
In display grounds and in the fields, from Transvaal, South Africa, to the Island of Guam, they enjoy a record of "PERFECT SATISFACTION" (not one complaint) to thousands of users. EXCEPTIONAL SERVICE, at very moderate cost.
**The S-W Supply Co.** Girard Kansas

TO THE GROWER—
We invite your inquiry about
**"VASCO-4"**
the perfected Zinc Seed Treatment for preventing
**DAMPING-OFF and SEED DECAY**
VIRGINIA SMELTING CO.
West Norfolk, Va.

PRINTS, MAPS and FOLIOS
**PLATE BOOKS**
Process Color Printing Co.
701 Searle Bldg., Rochester, N. Y.

**NURSERY TOOLS**
Nursery Spades, Kunde Knives and Pruning Shears, Budding and Grafting Supplies. Free 88-page Catalogue.
**A. M. LEONARD & SON**
Piqua - Ohio

## HELP WANTED

Salesman to sell on commission a general line of nursery stock to the nursery trade. Must have at least two years' experience. When applying, give reference, age and experience. Territory to be covered: Illinois and States East.

Maloney Bros. Nursery Co.
Established 1884. Dansville, N. Y.

## HELP WANTED

Man for permanent position to manage retail nursery agency department, selling to orchard planters. Preference given to man between 25 and 40 years of age. Typing experience essential. When applying, give experience and reference.

MALONEY BROS. NURSERY CO., INC.
Estab. 1884. Dansville, N. Y.

## SALESMAN WANTED

For retail landscape selling. Experience required. Must have good knowledge of plant materials and planting and some knowledge of design. Should have car. Start at once. Salary. State age, experience and full qualifications.
OUTPOST NURSERIES, INC.,
Ridgefield, Conn.

## HELP WANTED

Nursery foreman. Married. Experienced in the production of ornamental stock. State age, nationality and wages expected. Good opportunity in large Ohio nursery. Address No. 34, c/o American Nurseryman, 508 S. Dearborn St., Chicago.

## FOR SALE

Because of illness; 117-acre nursery farm, on both sides of U. S. Route 62; splendid opportunity for nurseryman or established nursery wishing branch in Buffalo district. Fine land for Daphne Cneorum, 20,000 plants at present. $30,000.00 or might consider active partner.
Mrs. Charles Moulthrop, Eden, N. Y.

## FOR SALE

Nursery, located at Orinda, Calif., the most promising territory in the East Bay section, easily accessible through new Broadway tunnel and San Francisco bay bridge. A real opportunity for man well qualified, young and industrious. Sickness compels to vacate.

Principals only considered. Write owner for full details. Box 727, Orinda, Calif.

## FOR SALE

Established small landscape nursery in prosperous midwestern city of 150,000 with large building program. All equipment necessary for any landscape job, including moving large trees. Owner's health requires removal to high arid section. A real opportunity at bargain. Address No. 37, c/o American Nurseryman, 508 S. Dearborn St., Chicago.

## CLASSIFIED ADVERTISING

**Peonies,** Irises, Oriental Poppies.
**Floyd Bass Peony Farm, New Augusta, Ind.**

**The Lissadell list of 1935 harvested alpine and herbaceous seeds has now been posted to customers. Further copies are available for those who write.**
**Manager, Lissadell, Sligo, Irish Free State.**

**Daffodils,** superior quality bulbs, field-run stock; special price for July and August only. Van Waveren's Giant, $17.00; King Alfred, $9.50; Golden Spur, $9.00; Victoria, $6.00 per bu.
**Vito Conenna Bulb Farm, Snohomish, Wash.**


## OBITUARY.

### Morris J. Dee.

Morris John Dee, executive vice-president of C. W. Stuart & Co., nursery firm of Newark, N. Y., died June 22 at his residence following a three months' illness. He was 43 years old.

Mr. Dee was born in Syracuse, N. Y., and obtained his education in the public schools and Syracuse University of that city. With the outbreak of the World war he enlisted and went overseas with the Third division. After the war he was manager of the New York Telephone Co. office in Carthage, N. Y., until he accepted a position with C. W. Stuart & Co. in the spring of 1920. Through a series of steady promotions he advanced to high executive positions. From 1921 to 1934 he acted in the capacity of general manager of Emmons & Co., Newark, a subsidiary of the Stuart firm. In 1934 he was made executive vice-president of the parent organization.

Also, Mr. Dee was a past president of the New York State Association of Nurserymen and a member of the executive committee of the American Association of Nurserymen for the past two years. He was well known for his active participation in local civic affairs. He was a director of the Newark chamber of commerce and of the Arcadia Community Chest and a member of the Knights of Columbus, the Elks, the Newark Country Club, the Washington post of the American Legion and the local Parent-Teachers' Association.

Surviving Mr. Dee, besides his widow, are one son, three daughters, three brothers and a sister. Funeral services were conducted June 25 at St. Michael's church, with burial in St. Mary's cemetery, Syracuse.

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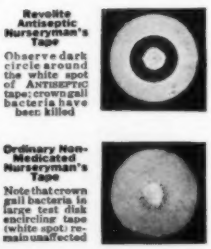

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